



Queensland Year Book

1984

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(Front endpaper) Brisbane in 1880,
portion of a painting by J. A. Clarke

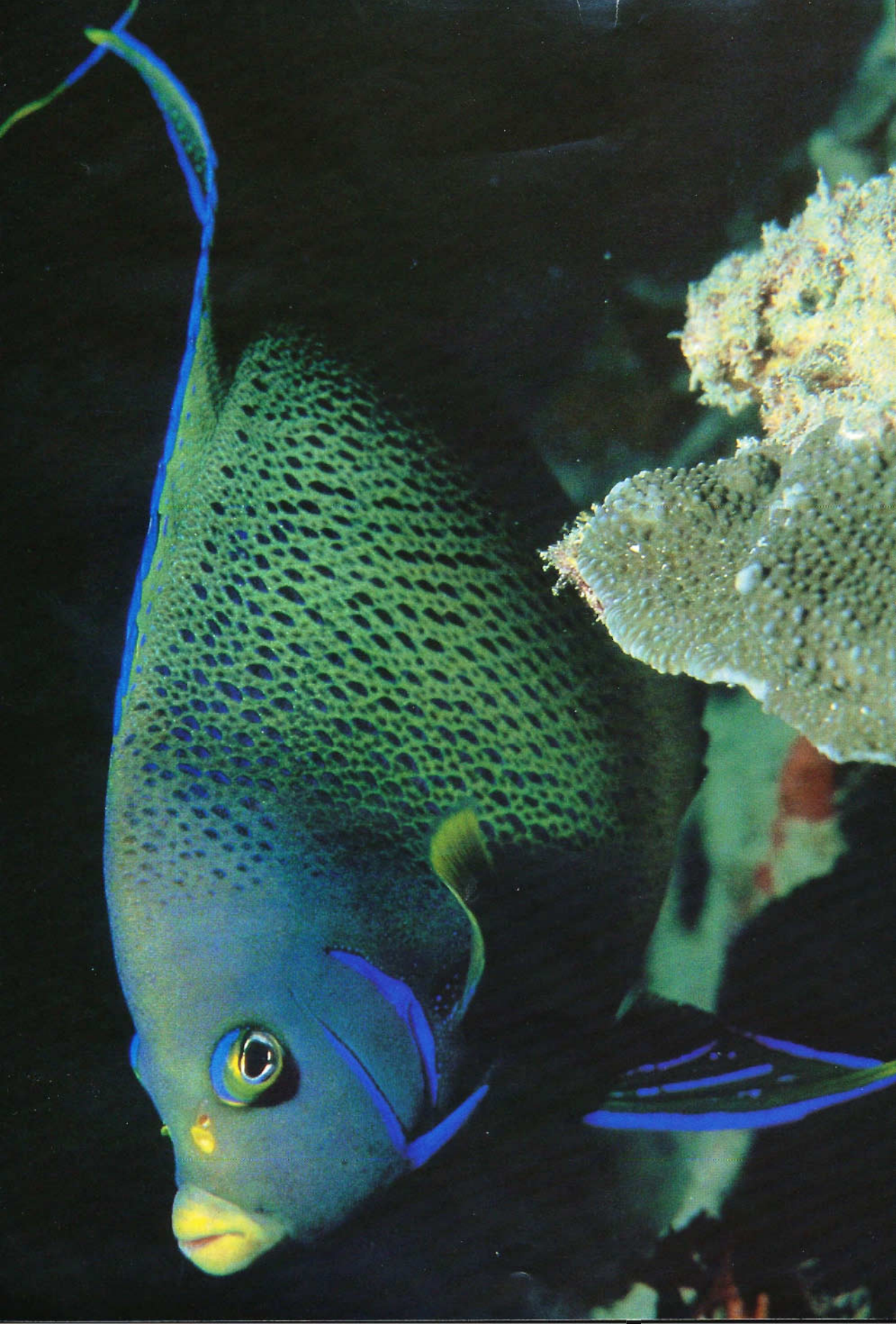
Photo: Queensland Day Committee

(Frontispiece) Blue angel fish (*Pomacanthus semicirculatus*), Heron Island

Photo: David Biddulph

(Back endpaper) Brisbane in 1984,
from the Story Bridge

Photo: Queensland Newspapers Pty Ltd



QUEENSLAND YEAR BOOK 1984

QUEENSLAND YEAR BOOK 1984

No. 44

O. M. MAY

DEPUTY COMMONWEALTH STATISTICIAN

AND

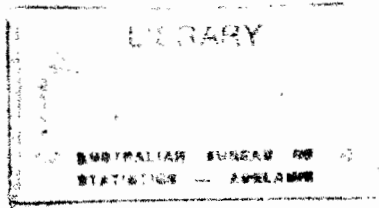
GOVERNMENT STATISTICIAN FOR QUEENSLAND

AUSTRALIAN BUREAU OF STATISTICS
QUEENSLAND OFFICE

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CONTENTS

	Pages
Maps, Diagrams, and Illustrations	xi
Explanatory Notes	xiii
Preface	xv
CHAPTER 1 GEOGRAPHY AND THE ENVIRONMENT	
1 Area and Position 2 Physical Features 3 Geology 4 Soils 5 Vegetation	
6 Fauna; Terrestrial Animals, Fish 7 Conservation; National Parks, Wildlife	
8 Parks for Preservation and Pleasure 9 The Great Barrier Reef	1-29
CHAPTER 2 CLIMATE AND SEASONS	
1 Living Conditions 2 Meteorology 3 Rainfall 4 Droughts 5 Tropical	
Cyclones 6 Flooding and Floodwarnings 7 Sunshine 8 Climate and	
Agriculture 9 Seasonal Activities in Agricultural Industries 10 Seasonal	
Conditions in Queensland, 1982-83	30-55
CHAPTER 3 DISCOVERY, SETTLEMENT, AND DEVELOPMENT	
1 The Aborigines 2 Discovery and Early Exploration 3 The Penal Settlement	
4 Exploration during the Convict Era 5 Free Settlement before Separation	
6 The Major Explorations, 1840 to 1859 7 Separation from New South Wales	
8 The Separate Colony 9 The 1866 Financial Crisis 10 Gold Discoveries	
11 Pastoral Expansion 12 Effect on the Aborigines 13 Land Legislation	
14 Agriculture, Sugar Cane and the Kanakas 15 The Shearers' Strike of 1891	
16 Annexation of New Guinea 17 Colonial Life 18 Federation 19 Govern-	
ment in Action 20 Agriculture 21 The Livestock and Meat Industries	
22 Mining 23 Manufacturing 24 Education and Health	56-72
CHAPTER 4 GOVERNMENT	
1 System of Government; Governors; Queensland Ministry; Premiers of	
Queensland 2 The Queensland Parliament; Members' Salaries and Pensions,	
Method of Voting, 1983 Election, Officials in Parliament, and Ombudsmen	
3 State Governments 4 The Commonwealth Government; Ministry; Queens-	
land Members of Parliament, 1983 Election 5 State Administrative Arrange-	
ments 6 Railway Department 7 Local Government 8 Divisions of	
Queensland	73-95
CHAPTER 5 LAND SETTLEMENT	
1 General; Land History 2 Areas and Tenures; Freehold Land, Leasehold	
Land, Land under Mining Acts, Land Reserved for Public Purposes ..	96-101
3 Soil Conservation 4 Irrigation and Water Conservation; Development of	
Water Resources, Water Conservation, Irrigation Areas and Projects, Under-	
ground Water Supplies, Irrigation on Agricultural Establishments, The	
Bradfield Scheme	101-110
CHAPTER 6 POPULATION	
1 Growth of Population; Overseas Migration, Australia	111-114
2 Age Distribution of Population 3 Geographical Distribution of Population;	
Local Authorities and Suburbs, Urban Centres, Brisbane Statistical Division,	
and Statistical Districts	114-125

CHAPTER 7 VITAL STATISTICS

1 Registration of Vital Events 2 Births; Masculinity, Birth Rates, Fertility and Reproduction Rates, Ages of Mothers and Durations of Marriages, Ex-nuptial, Legitimation, Multiple, Still-births	126–130
3 Deaths; Death Rates, Still-births and Infant Mortality, Maternal Mortality, Expectation of Life	130–133
4 Marriages; Marriage Rates, Age and Marital Status, Category of Celebrant	133–134
5 Divorces	134–136

CHAPTER 8 EDUCATION

1 General; Assistance Available, Government Expenditure 2 Pre-primary, Primary, Secondary, and Special Education; Migrant Education 3 Post-secondary Education; Technical and Further, Advanced, University 4 Public Cultural Facilities; Queensland Cultural Centre, Libraries, Museums, Cultural Activities, Art Gallery, Film Corporation, Botanical Gardens	137–154
---	---------

CHAPTER 9 LAW, ORDER, AND PUBLIC SAFETY

1 Introduction 2 The Legal System; Civil and Criminal Jurisdiction, Children's Courts, The Licensing Court, The Legal Profession, Eligibility for Jury Service, Legal Assistance	155–158
3 Police 4 Criminal Courts 5 Prisons, Probation, and Parole; Children Committed to Care and Supervision 6 Liquor Licences	158–166
7 Public Safety; Fire Brigades, Surf Life Saving, Protection from Sharks, Road Safety Council, State Emergency Service	166–168

CHAPTER 10 HEALTH

1 Public Health Services; Commonwealth, State, and Local Authority 2 Private Practitioner Services 3 In-patient or Residential Facilities; Hospitals, Nursing Homes 4 Patients Treated in Hospitals 5 Patients Treated in Psychiatric Institutions 6 Causes of Death 7 Non-residential Facilities; Out-patient Services, Day Centres, Domiciliary Nursing Services, Ambulance Services 8 Supportive and Ancillary Health Services; Red Cross Blood Transfusion Service, Queensland Recreation Council 9 Cremations	169–198
--	---------

CHAPTER 11 SOCIAL WELFARE

1 General; Commonwealth, State, Private Organisations and Institutions 2 Pensions; Age and Invalid, Widows' and Supporting Parents' Benefits, Disability and Service 3 Unemployment, Sickness, and Special Benefits 4 Residential Welfare Establishments; Homes for the Aged, Handicapped, and Children 5 Non-residential Services for the Aged and Sick 6 Children's Services; Adoption of Children, Children in Care 7 Health Benefits; Medical and Hospital, Pharmaceutical, Nursing Home, Handicapped Persons 8 Family Benefits and Other Allowances; Rehabilitation Service 9 Aboriginal Population and Welfare 10 Other Welfare Services; Senior Citizens' Centres, Sport	199–214
---	---------

CHAPTER 12 LABOUR FORCE

1 Introduction	2 Labour Force Status of the Population	3 Characteristics of the Labour Force; Industry, Occupation, Distribution	4 Labour Force Surveys; Employment Status, Supplementary Surveys	215-223
5 Industry and Commerce Training; Apprenticeship, Adult Trainees, Trainee Technicians	6 Local Trades Committees	7 General Employment Facilities	8 Employment Training and Assistance Schemes	223-229

CHAPTER 13 WAGES AND INDUSTRIAL CONDITIONS

1 Introduction	2 Industrial Arbitration and Trade Unions; State and Federal Industrial Authorities, Employers' and Employees' Unions Registered, Industrial Disputes	230-233
3 Wages; Basic Wages, Equal Pay for Male and Female Workers, Wage Indexation, Minimum Wages, Award Rates of Pay Indexes, Wage Rates and Earnings	4 Hours and Working Conditions	234-238
5 Surveys of Earnings and Hours of Employees	6 Industrial Accidents; Workers' Compensation Insurance	238-241 242-244

CHAPTER 14 TRANSPORT AND COMMUNICATION

1 Introduction	2 Sea Transport and Ports; Cargo and Shipping at Ports	245-248
3 Railways; Government, Traffic and Finances, Private Railways	4 Urban Passenger Services; Metropolitan Transit Authority	248-252
5 Roads; Lengths and Surface Types, Finance, Main Roads Department	6 Road Transport; Motor Vehicles, Registration Fees, Drivers, Licensing of Road Transport	252-263
7 Road Traffic Accidents	8 Air Transport	263-267
9 Posts and Telecommunications	10 Radio and Television Services	

CHAPTER 15 HOUSING AND CONSTRUCTION

1 Housing Census	2 Construction; Building, Construction Other than Building	3 Finance for Housing	268-283
------------------	--	-----------------------	---------

CHAPTER 16 AGRICULTURAL INDUSTRIES

1 General	2 Agricultural Establishments	3 Agricultural Holdings; Number and Size, Growers, Sizes of Flocks and Herds	284-287
4 Crops; Area, Production, Yield, and Value; Distribution of Specific Crops; Artificial Fertilisers	5 Livestock; Numbers, Slaughtering, Breeds	6 Wool	287-298
7 Dairying; Production and Value	8 Poultry Farming	9 Beekeeping	298-306

CHAPTER 17 MINING, FORESTRY, AND FISHERIES

1 Mining Industry; Royalties, Assistance, Accidents	2 Mineral Production	3 Mining Establishments; Summary of Operations	4 Mineral and Petroleum Exploration	307-316
---	----------------------	--	-------------------------------------	---------

CHAPTER 17 MINING, FORESTRY, AND FISHERIES—continued

5 Forestry; Operations of State Forestry Department, Reforestation	6 Timber	
Production; Sawmills, Plywood Mills		316–321
7 Fisheries		321–323

CHAPTER 18 MANUFACTURING INDUSTRY

1 Introduction	2 Assistance to Industry	3 Manufacturing Industry Statistics; Summary of Operations, Major Industry Sub-division, Geographical Distribution, Capital Investment, Foreign Ownership and Control, Size of Establishments	4 Principal Manufacturing Commodities	5 Electricity and Gas ..	324–336
----------------	--------------------------	---	---------------------------------------	--------------------------	---------

CHAPTER 19 EXTERNAL TRADE

1 Introduction	2 Total External Trade	3 Exports; Overseas, Interstate, Countries, and Commodities	4 Imports; Overseas, Interstate, Countries, and Commodities	5 Overseas and Interstate Trade	6 Overseas Trade at Queensland Ports	7 Export Price Index	8 Import Price Index	9 Assistance to Trade and Industry	337–353
----------------	------------------------	---	---	---------------------------------	--------------------------------------	----------------------	----------------------	--	---------

CHAPTER 20 MARKETING

1 The Queensland System	2 Australia-wide Marketing Schemes	354			
3 Sugar	4 Wheat	5 Other Grain Crops	6 Dairy Products	7 Eggs ..	354–363
8 Wool	9 Cotton	10 Fruit and Vegetables	11 Other Farm Products ..		363–366
12 Meat and Fish	13 Coal				366–369

CHAPTER 21 PRICES

1 Introduction	2 Retail Price Indexes; Measurements of Price Movements, Consumer Price Index, Long-term Price Movements, Indexes of Retail Prices of Food in Queensland Towns	3 Retail Prices	370–377
4 Wholesale Prices of Farm Products and Meat	5 Wholesale Price Indexes; Building Materials, Metallic Materials, Materials Used in Manufacturing Industry, Articles Produced by Manufacturing Industry	6 Price Control, Consumer Affairs	378–385

CHAPTER 22 PUBLIC FINANCE

1 Introduction	2 Commonwealth and State Financial Relations; Payments to States and Loan Council Borrowings	386–393
3 Public Authority Finance; Outlay, Receipts, and Financing Items ..		393–397
4 Queensland Government Finance; Consolidated Revenue and Trust Funds, Outlay, Final Consumption Expenditure, Expenditure on New Fixed Assets, Receipts and Financing Items		397–403
5 Government Debt; Commonwealth and State Governments, Queensland Government		403–405
6 Taxation; Total Paid in Queensland, Income Tax, Income Tax Rates, Rebates, Income Tax Assessments, Company Tax, Land Tax, Other Taxes, Totalisator Operations, Stamp Duty, Customs and Excise Duty		405–411

CHAPTER 22 PUBLIC FINANCE—continued

7 Local Government; Functions, Receipts and Expenditure, Receipts and Outlay, Loans	8 Semi-government Bodies, Functions, Outlay and Receipts and Financing Items	411-416
9 State Financial Institutions; Agricultural Bank, State Government Insurance Office, Workers' Compensation Board, Public Trustee, Assistance to Industries, Golden Casket Art Union Office, Public Service Superannuation, Parliamentary Superannuation		416-419

CHAPTER 23 PRIVATE FINANCE

1 Money and Banking; Trading Banks, Bank Debits to Customers' Accounts, Savings Banks, Development Banks, Short-term Money Market	420-424
2 Bankruptcy 3 Insurance; Life, General 4 Companies 5 Credit Unions	424-427
6 Instalment Credit for Retail Sales 7 Finance Companies 8 Stock Market	427-429

CHAPTER 24 MISCELLANEOUS

1 Internal Trade; Retail Trade, Wholesale Trade	430-433
2 Value of Agricultural Commodity Production; Gross and Local	434-435
3 Tourism; Principal Resorts, Tourist and Travel Corporation, Tourist Accommodation Census and Surveys	4 Household Surveys
5 Energy and Resources	435-451

APPENDIX A SUMMARY OF QUEENSLAND STATISTICS SINCE 1860 453-477

APPENDIX B PRINCIPAL EVENTS 479-484

APPENDIX C RECENT INFORMATION 485

APPENDIX D SPECIAL ARTICLES 487

INDEX.. .. . 489-498

MAPS, DIAGRAMS, AND ILLUSTRATIONS

	Page
Brisbane in 1880	<i>front endpaper</i>
Brisbane in 1984	<i>back endpaper</i>
Blue Angel Fish, Heron Island	<i>frontispiece</i>
The Queensland Coat of Arms	<i>facing</i> xvi
Cooktown Orchid, Queensland's Floral Emblem	<i>facing</i> xvi
General Map of Queensland, showing Statistical Divisions and Chief Cities and Towns	<i>facing</i> 1
Coral Reefs, Heron Island	<i>facing</i> 16
Turtle and Staghorn Coral	<i>facing</i> 16
Beaked Coral Fish	<i>between</i> 16 and 17
Black-tipped Rock Cod	<i>between</i> 16 and 17
Sea Perch and Skin Diver	<i>between</i> 16 and 17
Coral Cod	<i>facing</i> 17
Two-banded Anemone Fish	<i>facing</i> 17
National Parks	23
Meteorology of Typical Stations	31
Main Types of Vegetation	<i>facing</i> 32
Average Summer and Winter Rainfall	<i>between</i> 32 and 33
Average Annual Rainfall	<i>facing</i> 33
Structure of a Cyclone	42
Climatic Zones	51
State Electorates	<i>facing</i> 64 and <i>between</i> 64 and 65
Federal Electorates	<i>facing</i> 65
Railway Operations	89
Land Tenures	99
The Bradfield Scheme	109
Age Structure of the Population	115
Vital Statistics Rates	133
Student Enrolment at Schools	141
Death Rates—Selected Causes	191
Gold Coast City Council Chambers	<i>facing</i> 192
The Entombed Warriors of China Exhibition	<i>facing</i> 193
Roads, Railways, and Ports	<i>facing</i> 224
Local Authority and Statistical Division Boundaries, Queensland	<i>between</i> 224 and 225
Local Authority and Statistical Division Boundaries, South-East Queensland	<i>between</i> 224 and 225

	Page
Giant Coal Train, Goonyella	<i>facing</i> 225
Drenching Sheep	<i>facing</i> 225
Basic Wage Districts	235
Wage Rates and Earnings Indexes	238
Microwave Communication Tower	<i>facing</i> 256
Container Terminal, Townsville	<i>facing</i> 257
A 'Mountain' of Raw Sugar	<i>facing</i> 257
Road Traffic Fatalities	262
New Dwellings Approved	275
Area of Crops	288
Livestock Distribution	<i>facing</i> 288
Mineral Occurrences	<i>facing</i> 289
Major Cereal Grain Crops	297
Cattle and Sheep Numbers	302
Construction of Tarong Power Station	<i>facing</i> 320
Balancing of a Turbine, Tarong Power Station	<i>facing</i> 321
A View of Brisbane	<i>facing</i> 321
Manufacturing Establishments	327
Manufacturing Establishments, Queensland and Brisbane Statistical Division	331
Destinations of Overseas Exports	342
Sources of Overseas Imports	345
Hot Air Ballooning, Gatton	<i>facing</i> 352
St Paul's Reflected in a Modern Office Building, Brisbane	<i>facing</i> 353
Jacaranda Trees, University of Queensland	<i>facing</i> 384
A Winter Sunset, Brisbane	<i>facing</i> 384
Townsville Shopping Mall	<i>facing</i> 385
Eungella National Park	<i>facing</i> 385
Government Finance	396
Tourist Accommodation Establishments	439
Coal Mining Projects and Reserves	444

EXPLANATORY NOTES

Symbols and Other Usages

The following symbols mean:

<i>n.a.</i>	Not available
<i>n.e.c.</i>	Not elsewhere classified
<i>n.e.i.</i>	Not elsewhere included
<i>n.e.s.</i>	Not elsewhere specified
<i>n.p.</i>	Not available for separate publication (but included in totals where applicable)
<i>n.y.a.</i>	Not yet available
<i>p</i>	Preliminary—figure or series subject to revision
<i>r</i>	Figure or series revised since previous issue
..	Not applicable
—	Nil or less than half the final digit shown
——	(Where drawn across a column between two consecutive figures) break in continuity of series

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Values are shown in Australian dollars (\$) or cents (c).

All measurements of physical quantities have been expressed in metric units.

For the current source of the information shown in the Summary of Statistics (Appendix A) refer to the relevant chapter.

Further References

At the end of the chapters a list of selected publications issued by the Queensland and Central Offices of the Australian Bureau of Statistics is given. These provide detailed statistical information on topics covered in the chapters.

A catalogue number is shown in brackets after the title, and this number should be quoted when ordering these publications.

A complete list of ABS publications produced in Canberra and in each of the State Offices is contained in the *ABS Catalogue of Publications* (1101.0) which is available from any ABS Office.

Citation of Acts

Acts and regulations of the Commonwealth and State Parliaments are given titles by which they may be cited. Where an act has been referred to in a general or descriptive manner, the full title has been shortened and shown in roman type. Acts which have been formally cited are set out as follows:

Commonwealth Acts—Acts are cited in italics with the year in roman type. Since July 1976, the year shown refers to the year of the original enactment only, e.g. an act formerly cited as the *Bankruptcy Act 1966–1969* is now cited as the *Bankruptcy Act 1966*.

Queensland Acts—All new and amended acts passed from August 1968 are cited as for Commonwealth acts but include collective acts with a dash between the year of the original act and the year of the latest amendment, e.g. *Children's Services Act 1965–1978*. Acts passed or last amended before August 1968 are shown in similar style with the addition of 'The', 'of' or 'to' to the title, e.g. *The Coal Industry (Control) Act of 1948* (original act) or *The Coal Industry (Control) Acts, 1948 to 1965* (collective act).

CALENDAR, 1984

	JANUARY					FEBRUARY					MARCH					APRIL				
Sun.	1	8	15	22	29	...	5	12	19	26	...	4	11	18	25	1	8	15	22	29
Mon.	*	9	16	23	*	...	6	13	20	27	...	5	12	19	26	2	9	16	*	30
Tues.	3	10	17	24	31	...	7	14	21	28	...	6	13	20	27	3	10	17	24	...
Wed.	4	11	18	25	...	1	8	15	22	29	...	7	14	21	28	4	11	18	*	...
Thur.	5	12	19	26	...	2	9	16	23	...	1	8	15	22	29	5	12	19	26	...
Fri.	6	13	20	27	...	3	10	17	24	...	2	9	16	23	30	6	13	*	27	...
Sat.	7	14	21	28	...	4	11	18	25	...	3	10	17	24	31	7	14	*	28	...
	MAY					JUNE					JULY					AUGUST				
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Tues.	1	8	15	22	29	...	5	12	19	26	3	10	17	24	31	...	7	14	21	28
Wed.	2	9	16	23	30	...	6	13	20	27	4	11	18	25	...	1	8	15	22	29
Thur.	3	10	17	24	31	...	7	14	21	28	5	12	19	26	...	2	9	16	23	30
Fri.	4	11	18	25	...	1	8	15	22	29	6	13	20	27	...	3	10	17	24	31
Sat.	5	12	19	26	...	2	9	16	23	30	7	14	21	28	...	4	11	18	25	...
	SEPTEMBER					OCTOBER					NOVEMBER					DECEMBER				
Sun.	30	2	9	16	23	...	7	14	21	28	...	4	11	18	25	30	2	9	16	23
Mon.	...	3	10	17	24	1	8	15	22	29	...	5	12	19	26	31	3	10	17	24
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Wed.	...	5	12	19	26	3	10	17	24	31	...	7	14	21	28	...	5	12	19	*
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Sat.	1	8	15	22	29	6	13	20	27	...	3	10	17	24	...	1	8	15	22	29

CALENDAR, 1985

	JANUARY					FEBRUARY					MARCH					APRIL				
Sun.	...	6	13	20	27	...	3	10	17	24	31	3	10	17	24	...	7	14	21	28
Mon.	...	7	14	21	*	...	4	11	18	25	...	4	11	18	25	1	*	15	22	29
Tues.	*	8	15	22	29	...	5	12	19	26	...	5	12	19	26	2	9	16	23	30
Wed.	2	9	16	23	30	...	6	13	20	27	...	6	13	20	27	3	10	17	24	...
Thur.	3	10	17	24	31	...	7	14	21	28	...	7	14	21	28	4	11	18	*	...
Fri.	4	11	18	25	...	1	8	15	22	...	1	8	15	22	29	*	12	19	26	...
Sat.	5	12	19	26	...	2	9	16	23	...	2	9	16	23	30	*	13	20	27	...
	MAY					JUNE					JULY					AUGUST				
Sun.	...	5	12	19	26	30	2	9	16	23	...	7	14	21	28	...	4	11	18	25
Mon.	...	*	13	20	27	...	3	*	17	24	1	8	15	22	29	...	5	12	19	26
Tues.	...	7	14	21	28	...	4	11	18	25	2	9	16	23	30	...	6	13	20	27
Wed.	1	8	15	22	29	...	5	12	19	26	3	10	17	24	31	...	7	14	21	28
Thur.	2	9	16	23	30	...	6	13	20	27	4	11	18	25	...	1	8	15	22	29
Fri.	3	10	17	24	31	...	7	14	21	28	5	12	19	26	...	2	9	16	23	30
Sat.	4	11	18	25	...	1	8	15	22	29	6	13	20	27	...	3	10	17	24	31
	SEPTEMBER					OCTOBER					NOVEMBER					DECEMBER				
Sun.	1	8	15	22	29	...	6	13	20	27	...	3	10	17	24	1	8	15	22	29
Mon.	2	9	16	23	30	...	7	14	21	28	...	4	11	18	25	2	9	16	23	30
Tues.	3	10	17	24	...	1	8	15	22	29	...	5	12	19	26	3	10	17	24	31
Wed.	4	11	18	25	...	2	9	16	23	30	...	6	13	20	27	4	11	18	*	...
Thur.	5	12	19	26	...	3	10	17	24	31	...	7	14	21	28	5	12	19	*	...
Fri.	6	13	20	27	...	4	11	18	25	...	1	8	15	22	29	6	13	20	27	...
Sat.	7	14	21	28	...	5	12	19	26	...	2	9	16	23	30	7	14	21	28	...

*Public holiday. Local holidays are granted for annual shows, the dates for the Royal National Exhibition in the Brisbane district for 1984 and 1985 being 15 and 14 August, respectively.

PREFACE

The *Queensland Year Book* is a general reference book containing the more important economic and social statistics of the State, together with information on history, government, physical features, vegetation, fauna, climate, and seasonal conditions.

The *Year Book* is intended to provide a permanent record of the economic and social developments of the period under review, and every effort has been made to present the statistical information in such a way that it can be readily understood by those who wish to acquire a knowledge of the State as well as by those who are practical users of statistics. The contents of statistical tables are amplified in most cases with an accompanying text and, where appropriate, diagrams and graphs have also been included. Also, at the end of each chapter, a list of publications relative to the subject matter of the chapter has been shown.

The statistical tables in this issue of the *Year Book* relate mainly to the periods ended 31 December 1982 or 30 June 1983, and the descriptive text has been taken forward to 31 October 1983, generally, and further for a few topics of major significance. Special articles on the Great Barrier Reef, the Bradfield Scheme, the Railway Department, energy and resources, and Witches Falls National Park (the first in a series describing national parks) have been included.

More detailed, and in many cases more up-to-date, statistics of the various topics contained in the book are available in other Australian Bureau of Statistics (ABS) publications.

This Office maintains an Information Service, which, on request, supplies available statistical information and advice on which publications are appropriate, and a Library in which all publications of the Bureau are available for reference. Businessmen, government officers, members of the public, and students are invited to make use of these services.

As I shall be retiring shortly, I particularly wish to record my sincere appreciation of the continued co-operation received from business firms, primary producers, private organisations, individuals, and Government Departments and Authorities who provide the basic data from which the contents of the *Year Book* and of all other Bureau publications are derived. Without this co-operation, the provision of the wide range of detailed information provided in this book would not have been possible.

The preparation of this *Year Book* has been directed by Mr B. G. Thomson, B.Sc., B.A.(Admin.), and carried out by an editorial staff under the control of Mr D. G. McKauge, B.Econ., B.Com. I wish to thank these officers and indeed all the staff of the Queensland Office of the ABS who have contributed to the production of the *Year Book*. I should like to extend my thanks to Watson Ferguson and Company for the advice and assistance provided, and for the quality of the work produced.

O. M. MAY

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and Government Statistician for Queensland

Australian Bureau of Statistics,
Queensland Office,
Statistics House,
345 Ann Street, Brisbane.

30 June 1984



The Coat of Arms was authorised originally in 1893 by Royal Warrant. The Supporters—the brolga and red deer—were assigned by Royal Warrant signed by the Queen during her Silver Jubilee Year visit to Queensland on 9 March 1977. Agricultural industries (represented by cattle, sheep, grain, and sugar cane) and mining (represented by a column of gold on a bed of quartz) are depicted. The crest above the shield incorporates the State Badge comprising the Queen's Crown superimposed on the Maltese Cross and resting on entwined gold and black bands. The scroll motto in Latin is translated as **Bold, Aye, And Faithful, Too!**

Queensland's floral emblem is the Cooktown Orchid (*Denrobium bigibbum*) and was proclaimed in 1959. It is a native flower growing profusely around Cooktown in the north-east while it is also cultivated in many urban centres.

The orchid is an epiphyte (not a parasite) and grows on a variety of trees. The delicate purple blossom flowers between February and early July although no single plant blooms for the total period.





THE TOTAL AREA OF QUEENSLAND is 1,727,000 sq kilometres, representing 22½ per cent of the area of Australia.

THE AREA WITHIN THE TROPICS is 933,000 sq kilometres representing 54 per cent of the State.

THE GREATEST LENGTH is 2,100 kilometres and the GREATEST BREADTH 1,450 kilometres.

EASTERN STANDARD TIME, 10 hours ahead of Greenwich Mean Time, is observed throughout the whole State.

URBAN CENTRES with population in 1981 of:

- 100,000 & OVER shown as: ■ BRISBANE
- 40,000-99,999 shown as: ■ TOWNSVILLE
- 15,000-39,999 shown as: ■ MACKAY
- 4,000-14,999 shown as: ○ Bowen
- UNDER 4,000 shown as: • Hughenden

STATISTICAL DIVISIONS shown in Red

Chapter 1

GEOGRAPHY AND THE ENVIRONMENT

1 AREA AND POSITION

The State of Queensland, with an area of 1,727,000 square kilometres, occupies the north-eastern portion of the Australian continent. It lies within 10 and 29 degrees south latitude and 138 and 154 degrees east longitude. It has approximately 7,400 km of coastline, and has land boundaries of 1,625 km with New South Wales, 630 km with South Australia, and 1,045 km with the Northern Territory. From north to south its greatest distance is 2,100 km and from east to west 1,450 km. The area is 22.5 per cent of the Australian continent, and the occupied area 31 per cent of the Australian occupied total.

A comparison of the areas of the various States and Territories is shown in the table below.

AREAS OF STATES AND TERRITORIES, AUSTRALIA

State or Territory	Whole State		Within Tropics	
	Area	Proportion of total	Area	Proportion of total
	'000 sq km	per cent	'000 sq km	per cent
New South Wales	802	10.4	—	—
Victoria	228	3.0	—	—
Queensland	1,727	22.5	933	31.6
South Australia	984	12.8	—	—
Western Australia	2,525	32.9	934	31.6
Northern Territory	1,346	17.5	1,090	36.9
Australian Capital Territory	2	0.0	—	—
Mainland	7,615	99.1	2,957	100.0
Tasmania	68	0.9	—	—
Australia	7,682	100.0	2,957	100.0

The Queensland tropical area of 933,000 square kilometres is 54 per cent of the whole State. Because of its physical, climatic, and living conditions, this vast area is relatively immune from diseases and other disabilities commonly experienced in other tropical areas.

The western boundary of the State roughly coincides with the limits of profitable occupation of central Australia, but useful pastoral country stretches in an intermittent belt from the Barkly Tableland in north-western Queensland through the Northern Territory to the Kimberley area in the north of Western Australia.

2 PHYSICAL FEATURES

(Contributed by N. C. Stevens, B.Sc., Ph.D.)

Four landscape regions may be recognised in Queensland: the Eastern Highlands, the Western Plains, the North-Western Uplands, and the islands and reefs which project above the Continental Shelf. On the east coast narrow coastal plains may be present; around the Gulf of Carpentaria, the coastal plain merges into the Western Plains. The three major regions of the

Mainland (Eastern Highlands, Western Plains, and North-Western Uplands) correspond broadly to three different geological groups, the folded Palaeozoic rocks of the Tasman Geosyncline, the near-horizontal Mesozoic strata of the Great Artesian Basin, and the Precambrian rocks of the Australian Shield.

The Eastern Highlands constitute a narrow belt extending west from the eastern coastal plains for 80 km in the far north to 480 km inland from Rockhampton. The only high mountains in this belt are in the north, Mount Bartle Frere, 1,622 m, and south, Mount Barney, 1,362 m, but not all the highlands are mountainous; much plain and plateau country is included. The dominant trend of the mountain ranges is north-north-west and south-south-east, the same as that of the folded layers of Palaeozoic rocks. The main divide between east- and west-flowing streams diverges somewhat from the general trend, closely approaching the coast north of Cairns and also near the southern State border. In much of central Queensland the divide is in plateau country. Steep, east-facing escarpments are developed close to the main divide north of Cairns, and in the Carnarvon and Main Ranges of the southern part of the State. In most places on the western side, the Eastern Highlands grade imperceptibly into the Western Plains.

The coastal ranges east of the main divide have been formed mainly from resistant Palaeozoic metamorphic rocks and granites and in many places are higher than the main divide.

Between the coastal ranges are narrow corridors of weaker rocks; offshore the ranges and corridors, now submerged, make festoons of islands and intervening deep channels, especially between Rockhampton and Innisfail. Some of the tableland or plateau country, e.g. the Atherton Tableland, has been formed from horizontally layered volcanic rocks of comparatively recent age.

The easterly flowing rivers in the north, the Barron, Tully, and Herbert Rivers, are mostly short streams which have cut deep gorges in the escarpment. In central-eastern Queensland, the large river systems, the Burdekin and Fitzroy Rivers, have tributaries flowing into them from all directions and have cut gaps in the coastal ranges. Many of the east-flowing rivers and their tributaries flow for some distance parallel to the trend of the Palaeozoic rocks, e.g. the Mary and Brisbane Rivers, before turning east along areas of weaker rocks.

About two-thirds of Queensland is in the region known as the Western Plains, underlain by Mesozoic sandstones and shales of the Great Artesian Basin. The drainage of this region is to the Darling River system in the south, towards Lake Eyre in the south-west, and to the Gulf of Carpentaria in the north. Most of the rivers have very gentle gradients and flow only after heavy rain. Exceptionally, the Diamantina River and Cooper's Creek reach Lake Eyre, and at these times, flood waters spread laterally for many kilometres.

These inland streams are characterised by a network of numerous interlacing channels or distributaries, which has given this region its name, the Channel Country. Ephemeral lakes exist as shallow depressions adjacent to major watercourses. Between river valleys there are remnants of once-continuous plateaux of resistant silcrete or laterite, now forming low mesas.

In the far south-west, wind-blown sand forms longitudinal dunes on the eastern margin of the Simpson Desert. The red desert dunes have a north-north-west south-south-east trend, are asymmetric with the steeper sides to the east, and are separated by claypans.

The country of the North-Western Uplands resembles parts of the Eastern Highlands, as both are composed largely of folded layers of old metamorphic rocks and granites, giving rise to rugged country. Ridges are in many places of quartzite, with north-south trend, and of similar maximum heights, representing a former erosion surface, since elevated. In the north, horizontally bedded limestones have been strongly dissected. Behind the North-Western Uplands are the plains of the Barkly Tableland.

Much of the Eastern Coastline consists of long, sandy beaches, which in many places are arcs with a pronounced curve at the south end of the beach, close to a rocky headland. Waves

caused by the prevailing south-east winds result in a northerly directed longshore current, which has built spits across the mouth of estuaries and shallow bays. Beach erosion is greatest in southern Queensland in periods of strong south-easterly winds, and particularly affects the open ocean coastline, e.g. the Gold Coast, the Sunshine Coast (between Caloundra and Double Island Point), and the open ocean beaches of the large sandy islands. In the north, protection is afforded by the Great Barrier Reef and islands.

Sand dunes, some built one on top of the other to form very high sand deposits, are a feature of the coast. High dune deposits are especially well-developed north of Noosa and on the sandy islands, Fraser, Moreton, and Stradbroke Islands. Parallel sand ridges are found at the seaward edge of many of the coastal plains. Stranded beach ridges and shoreline deposits, together with wave-cut platforms on some rocky headlands, point to a general regression of the sea from a high level of +3 m in Pleistocene times. Near Brisbane, radiocarbon dating indicates that 4,400 years ago the sea was about 1 m above its present level. Part of this might represent regional elevation of the land.

The Great Barrier Reef has been formed by the growth of corals, algae, and other marine organisms on a continental shelf which ranges from 19 km wide near Cooktown to over 240 km wide near Rockhampton, and covers a total length of some 1,900 km.

North of Cairns the reef comprises an outer linear barrier of small, crescent-shaped reefs fronting a very steep continental slope. Behind is a zone of scattered platform reefs and closer to the mainland, the 'steamer channel', with low wooded islands. In Torres Strait, the islands are mostly of continental material, rocks similar to the mainland, but include some young extinct volcanoes. The mainland coastline, and some of the islands, are bordered by fringing reefs.

South of Cairns, the outer zone of reefs is replaced by broad platform reefs at successively greater distances from the mainland, but these are still some distance west of the edge of the continental shelf. Closer to the mainland there are high, rocky, continental islands, e.g. Hayman Island, bordered in places by fringing reefs. At the southern end of the Reef, low islands of the Capricorn and Bunker Groups include Heron Island, a sand cay, sited on the leeward side of an extensive reef.

3 GEOLOGY

(Contributed by Geological Survey of Queensland)

The geology of Queensland is most conveniently described by referring to the present surface distribution of three great structural units:

- (i) Ancient rocks of the Australian Precambrian Shield exposed in the north-west and north of the State. This has been a relatively stable portion of the earth's crust during the past 1,200 million years.
- (ii) The Tasman Geosyncline, which extends for almost the entire length of eastern Queensland and had a complex history of dominantly marine deposition interrupted by major crustal upheavals for much of the Palaeozoic Era (about 600 to 250 million years ago). Subsequent continental sedimentation in this area took place under conditions of relative stability.
- (iii) The Great Artesian Basin, a large intervening and overlapping area (nearly two-thirds of the State) filled with gently warped Mesozoic and Cainozoic sediments dating back about 200 million years.

The Ancient Precambrian Shield Area

The outcropping complexly folded and faulted Precambrian strata comprise sediments and volcanics metamorphosed to varying degrees and widely intruded by granites and basic igneous rocks. Exposures in the Mount Isa, Georgetown, and Cape York Peninsula areas are believed to be parts of a continuous mass extending beyond these areas beneath younger rocks. The

depositional and structural evolution of this complex, involving great crustal changes, represents a long period of early geological time from about 1,900 to 1,200 million years ago. The complex was finally welded into a resistant block and uplifted, and since well before the beginning of the Palaeozoic Era it has remained essentially stable. The Georgetown and Cape York Peninsula blocks were the site of later granitic intrusions, and volcanics were erupted over parts of both blocks in late Palaeozoic and Cainozoic times.

The Precambrian rocks are extensively mineralised, the north-west ranking as one of the major metalliferous provinces of the world. The immense Mount Isa silver-lead-zinc and copper deposits, the Hilton, Lady Loretta, and Dugald River lead-zinc deposits, the Mary Kathleen and Westmoreland uranium deposits, the numerous copper deposits of the Cloncurry-Mount Isa district, the Constance Range iron deposits, the Etheridge gold and copper deposits, and a host of small metalliferous deposits all occur in Precambrian rocks.

Transgression of shallow seas from central Australia formed limestones and other sediments on the western and southern flanks of the Precambrian Mount Isa block in early Palaeozoic times. Except for localised middle Palaeozoic sediments of the Toko Range and thin Mesozoic and Cainozoic deposits, there is a complete absence of later rocks in this region. The early Palaeozoic sediments contain major resources of rock phosphate.

The Tasman Geosyncline

Palaeozoic Deposition. The western boundary of the Tasman Geosyncline trends south and south-east from Princess Charlotte Bay almost to the coast near Ingham, and then runs south-west beneath younger sediments of the Great Artesian Basin. Eastwards the geosyncline extended to the vicinity of the present coastline. Within this vast depositional area, at various places at different times during the Palaeozoic Era, great thicknesses of marine sediments (including coral reefs), volcanics, and some freshwater beds were laid down. As a result of periodic crustal stresses, these rocks were folded and faulted, invaded by igneous intrusions, and finally uplifted as a relatively stable block. Only the eastern and northern sections of the Tasman Geosyncline are exposed; the western part is deeply buried beneath the Great Artesian Basin. In the coastal area, the strata are now arranged in a series of meridional to north-north-westerly trending structural basins alternating with belts of more highly metamorphosed rocks.

Throughout the exposed area of the Tasman Geosyncline there is diverse mineralisation, which since the early days has supported a significant mining industry. The famous gold-fields of Gympie, Mount Morgan, Clermont, Ravenswood, Charters Towers, Cracow, and many lesser ones; the tin-fields of Kangaroo Hills, Herberton, Cooktown, and Stanthorpe; the copper deposits of Mount Morgan, Chillagoe, Peak Downs, Mount Perry, and elsewhere; the silver-lead deposits of Chillagoe, Herberton, and other centres; the tungsten-molybdenum-bismuth deposits of Wolfram Camp, Bamford Hill, and Mount Carbine; the manganese deposits of Gladstone and the Mary Valley; widely scattered large deposits of limestone, some of high purity; the fluorspar deposits of the Chillagoe district; granite and marble for building stone—these are some of the important and varied minerals which have been exploited.

The late Palaeozoic (Permian) sediments of the Bowen Basin, now exposed over a large area extending 500 kilometres south from Collinsville, include important coal measures. In recent years the vast coal resources of the Collinsville-Nebo-Gooniyella-Peak Downs-Saraji-Norwich Park-Blackwater-Baralaba-Moura-Gregory and Blair Athol areas have been mined on a large scale, particularly low-ash coking coals. Natural gas has been discovered in sediments of the Bowen Basin in the Rolleston area south of Springsure and beneath Mesozoic cover rocks in the Roma-Tara district. Permian coal measures also occur in the Galilee Basin of central Queensland and in small downfaulted blocks at Mount Mulligan and at Little River near Laura in the far north.

Mesozoic Deposition. As a result of crustal folding and faulting accompanied by granitic intrusions, the eastern part of the Tasman Geosyncline was uplifted and stabilised at the end of

the Palaeozoic Era. Subsequent Mesozoic deposition was restricted to isolated basins in which continental sediments, including coal measures, accumulated. The Ipswich and Walloon coal measures of the Ipswich and Moreton Basins, respectively, for many years provided south-east Queensland with industrial and domestic power. Other coal measures which have been mined are those at Callide, Mulgildie, Burrum, and Styx. Marine transgressions occurred in late Mesozoic (Cretaceous) time (about 120 million years ago) in the Maryborough Basin, which extended eastwards beyond the present coastline, at Stanwell west of Rockhampton, and in the Laura Basin north of Cooktown.

With the exception of the Maryborough Basin and the Esk Trough, the basins of Mesozoic deposition have not been intensely folded. However, widespread faulting indicates further crustal adjustments throughout the Mesozoic. Volcanism and granitic intrusive activity occurred in the region south of Rockhampton in early Mesozoic time, and persisted until the Cretaceous Period in the Maryborough Basin. Volcanics and granites of Cretaceous age are also known from the Bowen-Proserpine area.

The chief mineral resources in the Mesozoic sediments of coastal Queensland are coal, clay and shale for brick, pottery, and ceramic manufacture, and sandstone and tuff suitable for use as building stone. Extensive oil shale deposits occur in the Julia Creek area of north-western Queensland. Metalliferous deposits include mercury near Kilkivan and gold-copper in the Mackay-Bowen hinterland.

Cainozoic Deposition. Sediments of Cainozoic age (from 70 million years ago to the present day) were deposited in small lakes and depressions and along stream courses in the post-Mesozoic land surface. They are mainly flat-lying and undisturbed. Marine strata are not present on the mainland, but were penetrated by two wells in the Capricorn Channel, off Gladstone. The most notable event was the eruption of the thick basalt lava flows of the McPherson and Main Ranges and the Kingaroy and Springsure-Clermont areas and the intrusion of volcanic plugs forming the Glass House Mountains and the Peak Range near Clermont. Large areas of basaltic volcanics between the Atherton Tableland, Einasleigh, Hughenden, and Charters Towers are of quite young age (less than about 5 million years), as are also the basalts of Coalstoun Lakes, the Burnett River, and Bundaberg in south-east Queensland. Extinct vents are preserved as cones and crater lakes. There is no evidence of Pleistocene glaciation in Queensland. The Great Barrier Reef is a unique Quaternary addition, built up during gentle subsidence of the Continental Shelf. Coastal sand dunes have probably been developed in several cycles throughout Pleistocene time (since 2 million years ago) and are still forming today. They are major sources of rutile and zircon and also silica sand. Recent estuarine muds form coastal fringes and salt marshes.

In addition to mineral sands, economic mineral resources in the Cainozoic deposits of eastern Queensland include alluvial workings for gold at Clermont, Cape River, and Palmer River, for tin near Stanthorpe, Kangaroo Hills, Cooktown, and around Mount Garnet in north Queensland, and for sapphires at Anakie. Underground natural brines are exploited at Port Alma, as are clay and shale and river sand and gravel at numerous localities. Important supplies of underground water are obtained from river and coastal alluvium. Nickel deposits formed by lateritic weathering of serpentinites at Greenvale west of Townsville are currently being mined, and similar deposits occur near Marlborough, north of Rockhampton, where high-quality chrysoprase is produced. Of possible future value are oil shales near Gladstone, Nagoorin, Yaamba, Proserpine, and Duaringa and brown coal and lignite in the Rockhampton district.

The Great Artesian Basin

The sediments of the Great Artesian Basin were deposited in huge sags in the old surface of the western part of the stabilised Tasman Geosyncline. The buried basement surface is very irregular, and three major sub-divisions of the basin are recognised, separated by two buried ridges. These are the Surat Basin in the south-east; the Eromanga Basin in the west; and the Carpentaria Basin in the north, extending out beneath the present gulf of that name.

Sedimentation was more or less continuous through middle and late Mesozoic (Jurassic and Cretaceous) time, and was dominantly continental with a major marine transgression in the Early Cretaceous. Deposition continued into the Cainozoic with sedimentation over large areas, the result of which was the development of a vast land of low relief. A long period of weathering commencing in Miocene time (about 20 million years ago) produced a deep layer of lateritic soil, characterised by concentration of iron and aluminium oxides in the upper zone, over almost the whole surface of Queensland. Irregularly distributed sheets of highly siliceous rock called 'billy' or 'porcellanite' form a hard surface capping or duricrust. The gibber plains of the far west are accumulations of pebbles of 'billy' produced by erosion and break-up of the duricrust capping. At a later stage, shallow lacustrine deposition took place in isolated areas. Alluvial deposits along the present river systems include the extensive drifts of the Darling Downs which contain fossilised bones of giant marsupials. Among the most recent deposits are the aeolian sand dunes of the far south-west, forming the eastern edge of the Simpson Desert.

The huge deposits of bauxite (aluminium ore) extending north and south of Weipa are a product of lateritisation of rocks of the Great Artesian Basin, and widely scattered precious opal occurs in the far west. The productive Moonie and Alton oil-fields and the gas-fields of the Roma area produce from reservoirs within strata of the Surat Basin. Gas has been found in sediments of older basins beneath the Great Artesian Basin near Adavale (middle Palaeozoic Adavale Basin) and Innamincka (Cooper Basin of Permian age). Jurassic coal measures extend between Toowoomba and Tambo and have been exploited at Oakey and Injune. Low-grade Cretaceous oil shales at Julia Creek are of potential value because of their wide extent and small vanadium content. Underground water (artesian and sub-artesian) is an invaluable resource of the basin, and derives from several porous sandstone aquifers fed by rainfall on their elevated eastern outcrop areas.

More information about the geology of Queensland can be obtained from the publication, *Queensland Geology*, a geological map of the State at 1:2,500,000 scale with accompanying explanatory notes, issued by the Geological Survey of Queensland in 1976. Detailed information about specific areas is contained in numerous reports of the Geological Survey of Queensland and the Bureau of Mineral Resources, Geology and Geophysics, Canberra.

4 SOILS

(Contributed by P. L. Lloyd, Extension Agronomist,
Queensland Department of Primary Industries)

The Queensland Department of Primary Industries has surveyed the potential of the *Atlas of Australian Soils* mapping units in Queensland and from this has grouped the State's soils into five broad categories according to their potential for plant production.

The properties of particular soil types within each of these groups and their distribution in Queensland are discussed below in decreasing order of potential for plant production, based on fertility and water-holding capacity.

Group 1—Clays

This group includes the black, self-mulching cracking clays of the Darling Downs and Central Highlands. These soils have the highest sustainable fertility and best water-holding capacity of any Queensland soils and are suited to intensive dryland agriculture. They erode easily, however, and require special care on all sloping sites.

A large belt of grey and brown cracking clays runs from the New South Wales border to Charters Towers, corresponding with the distribution of brigalow (*Acacia harpophylla*) forest

communities. This area has the best potential for crop and sown pasture expansion in Queensland and has been the main area of agricultural development over the last 30 years.

The extensive Mitchell and Flinders grass plains of central-western Queensland and the plains of the Channel Country also consist of grey and brown and red cracking clays but the utilisation of these soils is restricted to seasonally productive native pastures due to the low rainfall.

Group 2—Fertile Loams and Friable Earths

Acid red friable earths (krasnozems) are associated with areas of previous volcanic activity along the Great Dividing Range. Their main occurrences are around Kingaroy and Atherton where they are used for intensive crop production, including peanuts, maize, navy beans, and potatoes. An extensive area of neutral red friable earths (red earths), south of Herberton, has potential for agricultural development.

Scattered throughout the State are small pockets of friable earths and deep fertile loams associated with river alluvial and levee deposition. These areas are locally very important as they are suited to cropping and generally have potential for irrigation. A significant area of deep fertile loams is used for sugar cane growing under irrigation in the Burdekin Delta.

Group 3—Duplex Soils with Permeable Subsoils

The most important soils in this group are the red-brown earths which are used for grain growing in the Western Downs and Maranoa areas of southern Queensland. Although only moderately fertile, the combination of a friable surface structure with good water-holding capacity in the subsoil makes these soils suitable for extensive grain growing.

Group 4—Massive Earths

The red, yellow, and grey massive earths have sandy to loamy surface soils grading to porous sandy clay subsoils. Although they have low fertility and poor water-holding capacity, a wide range of crops can be grown on the red massive earths where the rainfall is higher or irrigation is available. Fertiliser application is required for profitable crop production or improved pastures.

Large areas of red massive earths around Charleville are associated with mulga (*Acacia aneura*) communities and support cattle and sheep grazing on native pastures. Yellow and grey massive earths predominate in north Queensland and support extensive cattle grazing on native pastures.

Group 5—Sands, Infertile Loams, and Duplex Soils with Impermeable Subsoils

This group includes sands and loams with both very low nutrient status and very low water-holding capacity, and duplex soils having a hard blocky clay layer which is, in extreme cases, impervious to both water and plant roots.

Infertile sands occur as a large area of earthy sands north of Richmond and siliceous sands in the desert areas around Birdsville. Areas of infertile loams (lithosols) are scattered throughout the State with the most extensive area inland from Cairns. Land use consists mainly of grazing on poor native pastures.

Large areas of acid and neutral duplex soils with impermeable yellow and mottled-yellow clayey subsoils (yellow podzolics and soloths) occur in south-eastern Queensland where they are mainly utilised for semi-extensive cattle grazing on native speargrass pastures. There is potential for sown pasture development on these soils as they generally occur in the higher rainfall areas. The alkaline types (solonized solonetz and solodics) are poor soils normally used for forestry or

extensive grazing on native pastures. A large area of these soils occurs west of Dalby and north of Chinchilla.

AREA OF MAJOR SOIL GROUPS, QUEENSLAND, 1981
(^{'000 hectares})
(Source: Queensland Department of Primary Industries)

Statistical Division	Group 1	Group 2	Group 3	Group 4	Group 5	Total (a)	Area suitable for cropping
Moreton (b)	229	310	357	21	941	1,858	374
Wide Bay-Burnett (b)	261	514	462	352	2,797	4,390	582
Darling Downs	3,061	579	1,357	370	2,574	7,941	3,230
South-West	7,390	2,301	2,882	14,861	4,555	32,003	3,349
Fitzroy	2,902	251	2,110	1,957	4,365	11,586	1,957
Central-West	20,269	1,978	4,354	4,722	5,198	36,536	303
Mackay	1,771	333	778	1,114	2,534	6,530	1,179
Northern	566	830	1,882	2,517	4,088	9,958	752
Far North	445	1,325	1,059	11,256	10,147	24,245	1,843
North-West	12,848	2,293	1,987	6,850	7,067	31,045	648
Total rural	49,742	10,714	17,227	44,018	44,267	166,091	14,217
Non-rural (c)	134	995	323	1,653	3,586	6,691	..
Total	49,877	11,709	17,550	45,670	47,853	172,782	..

(a) Including areas devoid of soil such as bare rock and lakes: Wide Bay-Burnett, 5,000 ha; South-West, 14,000 ha; Central-West, 16,000 ha; Northern, 75,000 ha; and Far North, 13,000 ha. (b) Noosa Shire is included in the Wide Bay-Burnett Statistical Division. (c) Including National Parks, State Forests, and Timber Reserves gazetted at 1980 for which no cropping potential estimate was made.

Soil Utilisation

Several problems have occurred using Queensland soils for cropping. Some of these, such as salinity, compaction, and soil structure breakdown, are localised problems caused by over-clearing, poor irrigation practices, and frequent tillage. A more widespread problem is the potential for soil erosion. The increasing areas cleared for cropping in central Queensland and the large areas under summer crops, which leave the soil unprotected during periods of high storm risk, have made this the most serious problem facing Queensland's rural industries. Fertility decline is also widespread and has been observed in the grey clays and duplex soils associated with the brigalow belt which have had relatively short cropping histories.

5 VEGETATION

The vegetation of Queensland may be classified broadly into seven main types: rainforests, softwood scrubs, Acacia scrubs, open forests, open grasslands, spinifex, and Channel Country communities. These reflect the great complexity of soils, rainfall, and temperature which exist within the State. See the map 'Main Types of Vegetation' facing page 32.

Rainforests

Rainforest communities comprise complex mixtures of trees growing so close together that they exclude virtually all other vegetation except climbers and epiphytic plants such as orchids and ferns. They occur in discontinuous patches in regions of high rainfall along the east coast from the southern border almost to Cape York. Their distribution depends partly on the availability of moisture and partly on fertility of the soil. In southern areas they are almost confined to fertile red earths derived from basalt and other basic rocks or to rich alluvial soils along streams; in northern regions of very high rainfall they also occur on some soils derived from more acid rocks.

Most of the rainforests have been replaced by pasture or cultivation in the course of land development but some areas remain in National Parks and State Forests. About 1,000 species of

plants, many of which do not grow in other communities, are known to occur in Queensland rainforests.

Softwood Scrubs

These are known by many names, including monsoon forests, turkey scrubs, bastard scrubs, and bottle-tree scrubs. They are closed communities of trees and shrubs, mostly of plant species related to those in rainforests but generally with much smaller leaves; many of them are deciduous for a short time in the dry season.

Softwood scrubs are distributed sporadically in the eastern half of the State in regions with annual rainfall ranging from 750 to 1,500 mm, generally on fertile, friable, brown to grey-brown loamy soils. They often merge into brigalow scrubs on the one hand and light rainforest on the other.

Acacia Scrubs

Three major types may be recognised, each dominated by a single species of *Acacia*: brigalow (*Acacia harpophylla*), gidyea or gidgee (*Acacia cambagei*), and mulga (*Acacia aneura*). Brigalow and gidyea scrubs occur on fertile soils of heavy texture, grey to brown clays to clay-loams; mulga scrub grows on relatively infertile soils of lighter texture, brown to red-brown fine sandy loams.

Brigalow scrubs merge into softwood scrubs on the one hand and either gidyea or some types of open forest on the other. They occur on both sides of the Dividing Range from about latitude 21° southward in regions with annual rainfall ranging from about 500 to 900 mm. These scrubs are not continuous within the region marked on the map but occur in a mosaic with other communities, chiefly softwood scrubs and open forest of different types.

Gidyea scrubs occur mainly west of the 500 mm isohyet. They merge into brigalow in less arid regions and, in the more westerly areas, are usually associated with open grassland. Their distribution is discontinuous in a zone between about the 300 mm and 500 mm isohyets.

Brigalow scrubs and gidyea scrubs are virtually closed communities in which the trees grow so close together that there is very little room for grasses and herbage plants. In their natural state they can support very few livestock. Brigalow has been cleared on a very large scale for sowing of pasture grasses and for cultivation of green fodder and grain crops. Brigalow itself has an extensive system of storage roots with a great capacity to produce sucker regrowth. Gidyea scrubs are also cleared and either sown to pasture or allowed to develop natural grasses. Gidyea does not normally sucker from the roots and is easier to handle than brigalow.

In Queensland, mulga occurs in southern inland areas on red-brown sandy soils. Along its eastern margin, mulga is often mixed with open forest and many mulga communities contain Eucalypts, mainly poplar box (*Eucalyptus populnea*).

Mulga scrubs range from closed communities with few or no grasses to open, park-like communities with scattered trees and a grassy floor. Mulga itself is a valuable food for sheep and cattle and is used extensively for maintaining livestock during times of drought.

Open Forests

The term is used here to include a heterogeneous assemblage of plant communities for which many different names have been proposed, including woodland and savannah woodland. In this broad sense, open forest communities occupy nearly half the total area of Queensland. They can be considered in four regions, namely, semi-arid central region, semi-arid southern region, sub-coastal and coastal region, and tropical monsoonal region.

The semi-arid central region comprises the so-called 'desert' country of central Queensland. It occupies the low plateau region astride the Dividing Range between the Mitchell grass country

to the west and the brigalow and sub-coastal open forest country to the east. Soils are yellow to red sands and sandy loams. The vegetation comprises scattered trees, mainly Eucalypts, and a grassy floor, often with large amounts of spinifex grass (*Triodia*) and wire grass (*Aristida*). The perennial grasses are harsh and unpalatable but edible trees and shrubs are fairly common and ephemeral grasses and herbage lift the quality of the pasture for some months after rain.

The southern part of the semi-arid open forest region is marked by the absence of spinifex grasses, but wire grasses are common. The principal tree species is poplar box and there are patches of other Eucalypts, chiefly ironbarks. Mulga often occurs in these communities.

Included in the sub-coastal and coastal region are forests of many species on a variety of soils. They range from dense wet-sclerophyll forests along the fringes of rainforest in high rainfall areas to rather sparse ironbark and box forests in the more arid sub-coastal areas. Soils range from deep alluvials and well-drained loams to leached podsols, gravelly loams, and shallow clay loams overlying basalt. In nearly all of them the dominant trees are species of Eucalyptus but there is great diversity of species, not only between different communities but also frequently within the one community. In most of them, there is a grassy floor.

In the tropical monsoonal region there is considerable diversity of vegetation. The growing season is very short and intense and there is a long dry period each year. The forests consist of scattered trees and an understorey of tall grasses which grow very rapidly during the summer and lose their palatability and nutritive value equally rapidly during the autumn and winter. Various species of Eucalyptus are dominant in the tree layer. In low-lying areas, tea-trees (*Melaleuca*) often replace the Eucalypts, sometimes as stands of a single species.

Open Grasslands

These occur on heavy clay soils in semi-arid parts of the State. They fall into two groups, blue grass and Mitchell grass. Both are open communities of perennial tussock grasses with few or no trees or shrubs. The perennial grasses are summer growers, widely spaced and with bare ground between them which is occupied for a short time after rain by ephemeral grasses or herbage plants. These plant communities support most of the wool-growing sheep in the State. In more favourable regions they are cultivated for grain crops.

Queensland blue grasses (*Dichanthium*) were formerly dominant on black soils derived from basalt in the Central Highlands and the eastern Darling Downs. Much of this land is now under cultivation. In grasslands which occupy very large areas of grey to brown clay soils derived from rocks of Cretaceous age, mainly west of the 500 mm isohyet, the dominant plants are Mitchell grasses (*Astrebla*). Selective grazing of these and the supplementary feed provided by seasonal growth of other grasses and herbage in the spaces between the Mitchell grass tussocks makes this country particularly suitable for wool production.

Spinifex

Various species of *Triodia*, known as spinifex, occupy large areas of open stony and sandy soils in arid and semi-arid regions, mainly west of the Mitchell grass country and extending to the edge of the desert. Spinifex grasses form very large hemispherical tussocks. The leaves are very tough and fibrous and many of them have spiny tips and a resinous exudate at the base. They are of low palatability and nutritive value but are very drought resistant and, with the ephemerals which grow between the tussocks after rain, are capable of maintaining small numbers of cattle or sheep for a long time.

Channel Country

In the south-western portion of the State, the major rivers of the Lake Eyre system spread out into vast flood plains which are inundated at very irregular intervals. These alluvial soils are

extremely fertile and after flooding produce enormous quantities of very palatable and nutritious plants such as Cooper clover (*Trigonella suavissima*), channel millet (*Echinochloa turneriana*), and bluebush (*Chenopodium auriumum*). Along the main channels, coolibah (*Eucalyptus microtheca*) is common but otherwise the country is largely treeless.

6 FAUNA

Terrestrial Animals

(Contributed by Dr H. J. Lavery, M.Sc., Ph.D., M.Ec.)

The following account of fauna in Queensland relates to all amphibians and birds as well as terrestrial reptiles and mammals, whether native, migratory, or introduced, that are found wild by nature in this State.

For a more detailed account see the 1976 or 1977 issue of the *Year Book*.

Zoogeography

Terrestrial vertebrate animals in Australia comprise three broadly discrete assemblages identified as Torresian, Eyrean, and Bassian. Most species overlap these regions; thus, as examples in Queensland, the water python, *Liasis fuscus* Peters, the brolga, *Grus rubicundus* (Perry), and the Queensland blossom bat, *Syconycteris australis* (Peters), as Torresian forms, the shingle-back skink, *Trachydosaurus rugosus* Gray, the emu, *Dromaius novaehollandiae* (Latham), and the long-haired rat, *Rattus villosissimus* (Waite), as Eyrean forms, and Cunningham's skink, *Egernia cunninghami* (Gray), the chestnut teal, *Anas castanea* (Eyton), and the tiger cat, *Dasyurus maculatus* (Kerr), as Bassian forms, are often found outside these distribution ranges.

In Queensland the species comprising the Torresian fauna—particularly those characteristic of the major sub-division eastwards of the 'Carpentaria Barrier' (Flinders-Leichhardt Rivers)—are generally in their greatest abundance; the species of the Eyrean fauna may be most common either in this State or elsewhere; the Bassian fauna is more abundant in other parts in Australia.

Habitat

Habitat within these regions is the environment for fauna based on climatic factors, topography, geology, and consequent soils, vegetation, and other animal life; variations give rise to broad habitat types supporting groupings of species. All of the major natural Australian habitat types are well represented in Queensland, and two artificial habitat types, also with reasonably characteristic faunas, are becoming widespread.

These habitat types may be described briefly as follows:

Closed forest in Australia occurs most commonly in Queensland. Areas are distributed mainly on mountain ridges along the Great Dividing Range in three zones: predominantly deciduous tropical closed forest from Cape York to Coen; other tropical closed forest (evergreen) from 15°S to 20°S latitudes, that is from north of Cooktown to south of Townsville (Mount Elliot); and sub-tropical closed forest southwards from there (to southern New South Wales). The first zone, in particular, is predominantly of Indo-Malaysian flora having closest faunal affinities with New Guinea. Closed forests cover the smallest area of all habitat types and are extensively exploited for forestry and other agricultural pursuits.

Open forest, in many vegetation forms including woodland, is the most widespread habitat type throughout the State. Principal stands are in the broad sub-humid belt, 500–1,000 mm mean

annual rainfall, which includes the central highlands. This country is thoroughly used by man especially for beef cattle raising.

Grassland is found mainly as widespread plains in the central inland between the 250 mm and 500 mm isohyets from the New South Wales border to the Gulf of Carpentaria. The type has been increased artificially in recent times by use of open forest countryside for cattle pasturage; otherwise, grasslands are used predominantly for sheep rearing.

Desert is confined to the large south-western sector of Queensland receiving an average of less than 250 mm rainfall yearly. This habitat type thus adjoins the extensive areas of the inland river drainage system that also occurs in neighbouring States.

Freshwaters are usually abundant throughout the State during the annual late summer period of high rainfall; at other times this habitat becomes scarce. Water conservation is a necessary practice for most land use schemes and some major and many minor impoundments have been introduced since 1950. Nevertheless, most freshwater is still retained where rainfall is heaviest.

Saltwater areas are abundant at all times around the 7,400 km-long coastline and over the 207,000 square kilometre Great Barrier Reef. Some inland salt pans such as Lake Buchanan in central Queensland are also large. Disturbance of these areas by man is minimal at this juncture.

Cultivation has been present since the time of early exploration. This habitat, in forms ranging from increasingly distributed uniform areas of agricultural crops, 'mono-culture', to isolated patches of pastoral exploitation, now occupies all parts of the State and imposes on all natural types.

Urban habitat type is also artificially impinging on native types; its influence on native fauna is slower and eventually more absolute but the total area involved is smaller, limited mostly to the east coast, and principally in poorer faunal country.

History of Discovery

The first technical account of a species of native land animal in Queensland was of the Australian bustard, *Ardeotis australis* (Gray), recorded by Captain James Cook and Daniel Solander when they landed at Bustard Bay near Miriam Vale on 23 May 1770. Three sea-bird species—probably the greater frigate-bird, *Fregata minor* (Gmelin), red-footed gannet, *Sula sula* (L.), and little shearwater, *Puffinus assimilis* Gould—had been noted on 19–20 May somewhere east of Fraser Island. This voyage by Cook also eventually provided the first technical record of a mammal, with the collection of the grey Queensland ring-tailed possum, *Pseudocheirus peregrinus* Boddaert, from Endeavour River. Much controversy has been provoked by the first sighting by European man of a kangaroo also at this locality; 'Captain Cook's kangaroo, *Mus kanguru* Muller', is now reasoned to have been a wallaroo, *Macropus robustus* Gould. Subsequent enlightening coastal voyages by Flinders and Brown in the *Investigator* (1801–1803) were followed by both other sea-oriented exploration and overland discovery, for example, by King in the *Mermaid* and *Bathurst* (1819–1821), and notably by John Gilbert on overland expeditions including Leichhardt's expedition northwards from Darling Downs (commencing October 1844). Initial findings of Gilbert included the paradise parrot, *Psephotus pulcherrimus* (Gould), and the eastern chestnut native mouse, *Pseudomys gracilicaudatus* (Gould) which are amongst the scarcest species of fauna in Queensland. Sir Joseph Banks reported large lizards (specimens lost) on Lizard Island on 12 August 1770.

Composition

The numbers of native amphibian, reptile, bird, and mammal species in Queensland compared with those for the whole of Australia are shown in the following table.

Group	Numbers of native species	
	In Queensland	In Australia
Amphibians	(a) 77	(a) 137
Reptiles	(a) 275	(a) 489
Birds	(b) 547	(c) 683
Mammals	(b) 149	(d) 223

- (a) after H. G. Cogger (1975)—*Reptiles and Amphibians of Australia* (Reed: Sydney).
- (b) based on H. J. Lavery (1969)—*List of Birds in Queensland* (Churchill Memorial Trust: Canberra); and Queensland Museum unpublished data.
- (c) after H. T. Condon (1972)—Birds of South Australia. pp. 28–40 in: *South Australian Year Book, 1972* (Australian Bureau of Statistics: Adelaide); but note also J. D. Macdonald (1973)—*Birds of Australia* (Reed: Sydney) (725 species).
- (d) based on T. Iredale and E. Le G. Troughton (1934)—*A Check-list of the Mammals Recorded from Australia* (Australian Museum: Sydney); and W. D. L. Ride (1970)—*A Guide to the Native Mammals of Australia* (Oxford University Press: Melbourne).

The native amphibians are of four families—tree frogs, southern frogs, true frogs, and narrow-mouthed toads.

The native reptiles include 11 species of tortoises (one family), 182 species of lizards (five families), 80 species of snakes (six families), and 2 species of crocodiles (one family).

The native avifauna comprises 299 non-passerine species (of forty-nine families) and 248 passerine species (of twenty-four families), this sub-division being between non-perching and perching/song birds, respectively.

According to present-day considerations, the native terrestrial mammal fauna consists of 2 species of monotremes (two families), 70 species of marsupials (six families), and 77 species of placentals comprising 47 species of bats (seven families), and 30 species of rodents (one family).

A number of other species of reptiles, birds, and mammals occur within Australia only in this State. Most of these are distributed marginally from New Guinea through the north-east deciduous tropical closed forest, as examples, wood frog, De Vis's banded gecko, *Cyrtodactylus louisadensis* (De Vis), the green python, *Chondropython viridis* (Schlegel), the palm cockatoo, *Probosciger aterrimus* (Gmelin), the manucode, *Phonygammus keraudrenii* (Lesson and Garnot), the spiny bandicoot, *Echymipera rufescens* (Peters and Doria), and the spotted cuscus, *Phalanger maculatus* (Desmarest).

Many bird species undertake extensive and vital migrations; for example, 43 of the 67 species of Charadriiformes migrate to breed at localities as distant as Siberia e.g. eastern golden plover, *Pluvialis dominica* (Muller), Japan e.g. Australian snipe, *Gallinago hardwickii* (Gray), and Antarctica e.g. southern skua, *Stercorarius skua* (Brunnich). 'Equatorial migrations' notably to and from New Guinea, e.g. by the rainbow-bird, *Merops ornatus* Latham, and nomadic movements throughout the Australian continent, e.g. by the grey teal, *Anas gibberifrons* Muller, are commonplace.

The largest amphibian is the giant barred frog, *Mixophyes iteratus* Straughan, and the smallest frogs include the dwarf rocket frog, *Litoria dorsalis* Macleay. The largest (heaviest) reptile is the estuarine crocodile, *Crocodylus porosus* (Schneider), although the longest reptile specimen from Queensland is reported to be an 8.5 metre amethystine python, *Liasis*

amethystinus (Schneider). The largest bird is the cassowary, *Casuarius casuarius* (L.), weighing up to 110 kilograms and the largest native mammal, also by weight, is the grey kangaroo, *Macropus giganteus* Shaw, up to 89 kilograms. The smallest are, respectively, a four-fingered skink, *Carlia novaeguineae* (Meyer), the weebill, *Smicrornis brevirostris* (Gould), and the northern planigale, *Planigale ingrami* (Thomas), the last two each weighing 4 grams.

Fossils

The oldest fossil reptiles are several small Procolophodonts from the Rewan Formation, Lower Triassic age, approximately 215–225 million years old. The largest known is a Middle Jurassic Sauropod dinosaur, *Rhoetosaurus brownei* Longman; fragments suggest it was rivalled in size by Cretaceous Sauropods. Marine Cretaceous reptiles are more noteworthy than terrestrial forms. Tertiary fossils of lizards, snakes, crocodiles, and tortoises are known.

The oldest bird species in Queensland is *Dromiceius* sp. of the Riversleigh Fauna from the Carl Creek Limestone, near Riversleigh, north Queensland, of a late Tertiary age (approximately 10–15 million years ago); 30 fossil Queensland bird species have been named. The oldest mammal fauna is also the Riversleigh Fauna from the Carl Creek Limestone; 39 fossil Queensland mammals have been described.

Extinct groups of interest include the Diprotodontidae (dog-sized to rhinoceros-sized marsupials, including the largest marsupials known); the Thylacoleonidae or marsupial 'lions' (carnivorous relatives of the possums); the Thylacinidae or marsupial Tasmanian tigers; and fossil kangaroos such as the Sthenurinae (short-faced, heavy-bodied, large kangaroos), and kangaroo-sized relatives of the present-day rat-kangaroos.

Species Introduced by Man

Species introduced by man include 1 species of amphibian (a non-native family), 10 species of birds (six families, two non-native), and 20 species of mammals (nine families, eight of which are new to the State).

In view of the obvious problems created by these animals, it is perhaps fortunate that many attempted introductions of other species, e.g. rooks, blackbirds, thrushes, pheasants, partridges, and Californian quails have failed.

The total numbers of species, native and introduced, in Queensland are thus 78 amphibians, 275 terrestrial reptiles, 557 birds, and 169 terrestrial mammals, substantially more than elsewhere in Australia.

Interaction between Man and Fauna

The close relationship that has existed ever since Aboriginal man depended on native animals for food and some cultural activities has continued importantly to the present time in a variety of ways.

As food—During years of suitable rainfall conditions, an estimated 250,000 birds, mainly the black duck, *Anas superciliosa* Gmelin, are taken as food and for sport by duck hunters, distributed mostly as a relatively few concentrations in north-eastern Queensland and as a dispersed similar total in the south-eastern inland.

As commercial enterprises—Some native animals such as the freshwater crocodile, *Crocodylus johnstoni* (Kreffl), are hunted for commercial purposes. In the period 1966–1970 more than 4.5 million marsupials, predominantly the grey kangaroo, were harvested mostly in southern and central inland Queensland for skins and carcasses (meat industry). Similar cropping has been reported since 1880. All commercial enterprises involving native animals are presently under critical review.

As recreation—An inestimably large proportion of the considerable tourist trade in Queensland incorporates visits to the closed forests of north-eastern Queensland and the islands of the adjacent Great Barrier Reef. The fauna there is abundant, obvious, and attractive: as examples, the non-deciduous tropical closed forests (rainforests) include 15 of the 18 endemic bird species and 8 of the 14 endemic mammal species, with such colourful types as the golden bowerbird and striped ring-tail; the Reef is inhabited by 29 species of seven sea-bird families, with 19 species nesting on 78 islands (notably Raine Island, Bramble Cay, Masthead Island, Swain Reef, North West Island, One Tree Island, and Michaelmas Cay). There, total populations of some types such as the wedge-tailed shearwater, *Puffinus pacificus* (Gmelin), number millions of birds (in Capricorn Island Group).

As pests—Numerous claims of the adverse effects of native fauna on man, other than occasional localised problems, remain technically unsubstantiated. Most of these species are presently only of nuisance status in the fields of agricultural, pastoral, and fisheries production, as examples the dusky field rat, *Rattus conatus* Thomas, wedge-tailed eagle, *Aquila audax* (Latham), and little pied cormorant, *Phalacrocorax melanoleucos* (Vieillot), respectively; the fork-tailed kite, *Milvus migrans* (Boddaert), is one hazard to aviation; as a vector of diseases there is, for example, the silver gull, *Larus novaehollandiae* Stephens (dengue fever); and in more domestic situations, the black-backed magpie, *Gymnorhina tibicen* (Latham), attacks intruders and the spectacled flying-fox, *Pteropus conspicillatus* Gould, damages suburban fruit trees. Alternatively, the status as serious pests of a number of the introduced fauna species is beyond question.

Six species of front-fanged elapid snakes have infrequently produced fatal bites during contact with man.

Fish

(Contributed by E. M. Grant, M.Sc.)

Queensland waters probably support as many as 1,600 species of fish. This abundance is undoubtedly due to the wide range of ecological conditions pertaining to a coastline extending through nineteen degrees of latitude; to the proximity of the most extensive barrier reefs in the world; and to a freshwater habitat which varies between the clear, rushing coastal rivers of north Queensland and the harsh and precarious conditions that apply to the western streams.

One of the State's best-known fish is a freshwater form, a dipnoan, the Queensland Lungfish, a survivor of a prehistoric group. It occurs naturally in the Mary and Burnett Rivers, where it grows to a length of 1.8 m and a weight of 45 kg. The species has been introduced to the Brisbane River and its associated reservoir system, where it has flourished. The Dawson River Salmon (or 'True' Barramundi), an osteoglossid, is a second representative of a fossil group of fishes.

The fishes of Queensland vary in size from the massive but harmless 14 m Whale Shark to a 25 mm Blenny. Sharks and rays include the grotesque Hammerhead Shark, reputedly dangerous to man; Tiger and Whaler Sharks, both proven man-killers; the White Shark (or White Death), the largest and most ferocious, reaching a length of at least 9 m; the harmless and ornately-marked Wobbegong; the Green Sawfish, a form exceeding 6 m in length and with a toothed saw up to 1.8 m long; the beautifully-marked Blue-spotted Ray of Barrier Reef waters; the spectacular leaping Eagle Ray; and the huge but harmless Devil Ray.

Among the bony fishes there occur large surface shoals of Sprats, Anchovies, Pilchards, Hardyheads, and Garfish which comprise food for a wide array of predators: Mackerels, Tuna, Barracudas, Trevallies, Tailor, Sergeant-fish, Amberjacks, and Dolphin. Many of these latter

are important angling species. Game-fishermen in north Queensland have access to Black Marlin in excess of 450 kg, while both Blue and Striped Marlin occur in near coastal waters together with the spectacular Pacific Sailfish, notable for its great prussian-blue sail-like dorsal fin.

Visitors to the Great Barrier Reef may visit the colourful coral pools of the region, characterised by the dancing swarms of small fishes—Pullers, Humbugs, Footballers, Damsel-fish—that cluster about the living corals, where gaudily-patterned Wrasse, Parrot-fish, Surgeon-and Unicorn-fish, Moorish Idols, Squirrel-fish, Trigger-fish, Leather-jackets, and Butterfly Cod find shelter in the reef crevices. At this location line-fishing in deeper waters is usually highly productive of species which are at once colourful in appearance and esteemed as table fishes: Coral Trout, Sweetlip, Fairy Cod, Red Emperor, and Sea Perches.

Near coastal waters are characterised by a wide array of species perhaps less spectacular than the above, though none could be described as drab in appearance. These include the Grinners, Long-toms, Knight-fish, Bullseyes, Sweetlips (or 'Morwongs'), Whiptails, Diamond-fish, Butterfish, Spinefeet, Halibut, Weevers, Flounders, and Soles. In addition to these, the many species of particular commercial and angling significance include the Mulletts, Threadfins, Whittings, Pearl Perch, Barramundi (or 'Giant Perch'), Mangrove Jack, Javelin-fishes, Jewfishes, Snappers, Bream, Blackfish, and Flatheads. The coastal mangrove flats are inhabited by a remarkable little fish, the Mudhopper, often found crawling and hopping in a series of incredibly rapid skips and leaps over the exposed mud.

Apart from the Lungfish and 'True' Barramundi mentioned earlier, Queensland freshwaters support stocks of Bony Bream, Catfishes, Eels, Golden Perch, Australian Bass, Murray Cod, Silver Perch, Archer-fish, Sleepy Cod, Bullrout, and various Grunters, together with such smaller forms as Gudgeons, Silversides, Perchlets, and Rainbow-fishes. The last-named are of particular interest to aquarists. The remarkable Nursery-fish is found in western streams; males have a prominent hook on top of the head to which females attach their eggs for hatching.

There are comparatively few species of poisonous fishes in Queensland. They are divisible to those forms which are poisonous to eat, such as Toados, Box-fish, Chinaman-fish, Red Bass, and Paddle-tail, and those that inflict stings, such as Stingrays, Spinefeet (or 'Stinging Bream'), Butterfly Cod, Bullrouths, Scorpion-fish, and Stonefish. Of these the Stonefish is most feared; a sting causes immediate and intense pain, respiration becomes irregular, and partial paralysis often results. Fortunately, in recent years an antivenene has been developed.

7 CONSERVATION

(Contributed by Dr G. W. Saunders, D.Agr.Sc.)

General

The famous British ecologist, Elton, says: 'The case of general conservation is threefold. It is moral—no power without responsibility. It is also based on interest, whether personal, educational, or purely scientific—the deep study of the world as it was when man found it, or those parts still keeping some of the character and potentialities of that earlier untamed richness. Thirdly, it is an economic question, a question of human survival, or at the very least man's survival in environments that are worth surviving in'.

It is far more than just the setting aside of land as national parks or similar reserves. This is only a part of the process.

The chief problem remains that of fashioning, over the whole extent of occupied and exploited land, a mosaic of landscape and many small habitats within it that are as rich as possible consistent with keeping the necessary productivity of land and its use by man for so



Coral reefs at Heron Island—a tiny portion of the Great Barrier Reef

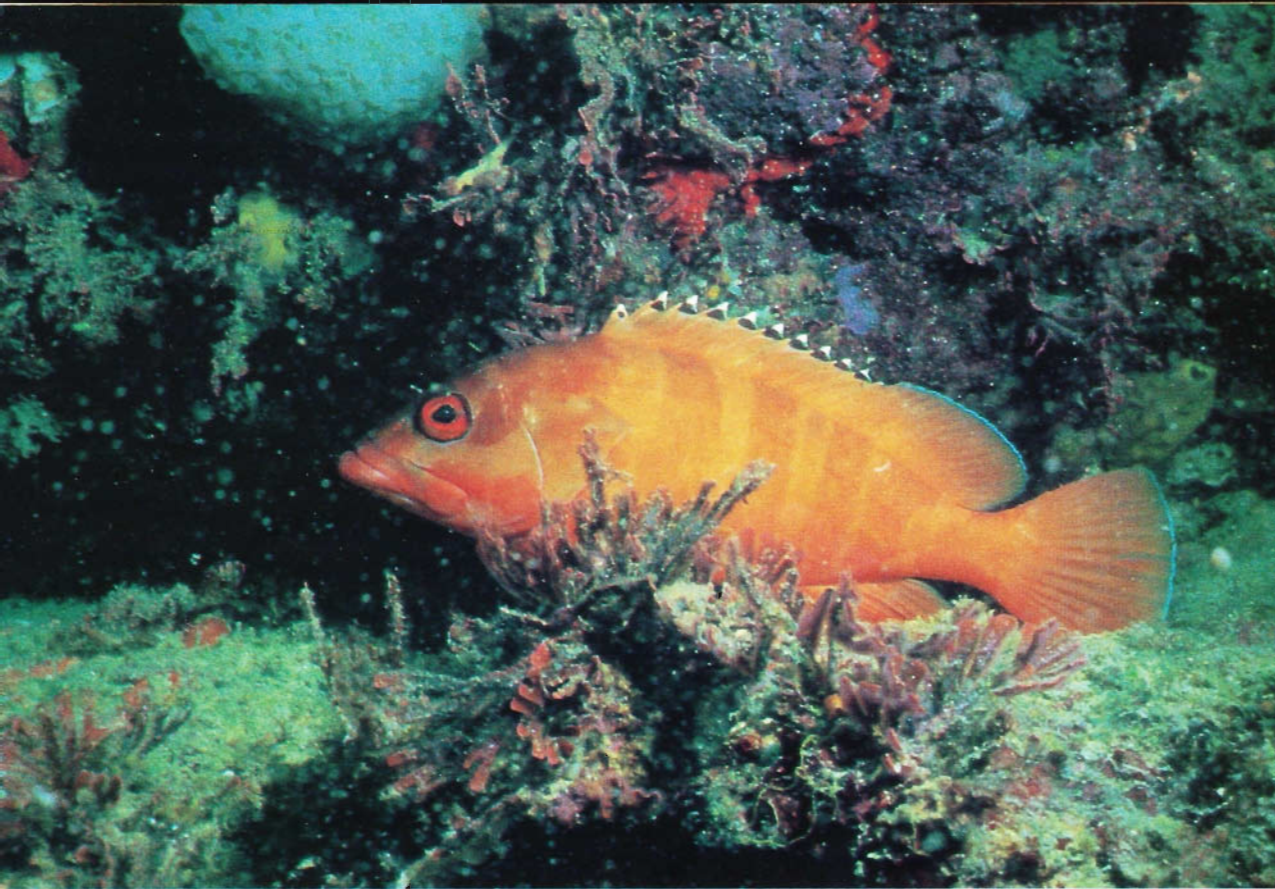
GEOGRAPHY AND THE ENVIRONMENT—Chapter 1

Photos: *Department of Zoology, University of Queensland*

A turtle swims over a reef of staghorn coral, Heron Island







Black-tipped rock cod (*Epinephelus fasciatus*)

GEOGRAPHY AND THE ENVIRONMENT—Chapter 1

Photos. David Biddulph

Sea perch encounter a skin diver
at the edge of Wistari Reef





Coral cod (*Cephalophotes miniatus*)

GEOGRAPHY AND THE ENVIRONMENT—Chapter 1

Photos David Biddulph

Two-banded anemone fish (*Amphiprion bicinctus*)



many different purposes. This will help to combat one of the greatest threats to mankind—namely environmental degradation and loss of variety. Basically that is what conservation is about.

Queensland governments have had a long history of association with nature conservation. The first legislative action was on 10 August 1877 when royal assent was given to an Act to provide for the protection of native birds. From October to March each year most native birds were protected. The penalty provided for breaches of the 1877 Act was a \$2 to \$10 fine, in default three months imprisonment.

The first protection given to native mammals was in 1906 when, from November to April each year, native bears (koalas) and possums were protected. All year protection was conferred upon the tree kangaroo, wombat, platypus, echidna, and pygmy glider.

The 1877 Act made provision for the declaration of reserves which were the forerunners of present-day sanctuaries.

The first national park in Queensland was Witches Falls on Tamborine Mountain (see page 20) proclaimed over an area of 131 hectares on 24 March 1908. This action was taken following representations by the Tamborine Shire Council.

Under the *National Parks and Wildlife Act* 1975–1982 and the *Fauna Conservation Act* 1974–1979, all native mammals, birds, reptiles, and two species of butterfly are protected throughout the State of Queensland. National parks in Queensland total 3,290,423 hectares. In addition there are 30,000 hectares of fauna reserves and almost 43,000 hectares of environmental parks. Sanctuary land, which consists mainly of private grazing properties, is in excess of 10 million hectares. Two of the largest national parks are the Simpson Desert and Lakefield National Park, Cape York, both of which exceed 500,000 hectares.

In Queensland all fauna is the property of the Crown and under the control of the fauna authority. This applies irrespective of the land tenure. The fauna authority is defined as the Minister for Tourism, National Parks, Sport and The Arts, and subject to him, the Director of National Parks and Wildlife.

On national parks, environmental parks, and fauna reserves the legislation protects the total environment—biological and physical.

The definition of nature conservation that the Queensland National Parks and Wildlife Service uses is the ensuring of the survival, in the wild state, of all our species of native fauna and flora, and of the natural landscape in the presence of man and his activities.

The role of the Service, therefore, concerns the conservation of nature (namely fauna, flora, and landscape) with a responsibility for recreation based on this.

National Parks

Prior to June 1975, national parks were administered by the Department of Forestry in terms of the *Forestry Act* 1959–1982. This Act states that the cardinal principle to be observed in the management of national parks 'shall be the permanent preservation, to the greatest possible extent, of their natural condition . . .'

It follows that the aim of management is to cater for legitimate usage while preserving this natural condition. Major problems of management arise from the conflict between use and preservation and in the difficulty of deciding what is the correct interpretation of 'natural condition' in parks. All too often national parks are surrounded by manipulated environments and subjected to many quite unnatural influences.

How these areas are managed will be influenced by the usage, which falls into two broad categories: scientific study and research; and public recreation and enjoyment.

Undisturbed natural areas are of immense interest and importance both for research and as a reservoir of biological material. All domestic animals and cultivated plants have evolved from original wild stock and the process still continues.

In the field of pure research, samples of undisturbed nature are required as the basic material for the study of natural communities. Studies of biogeography and the evolution of species likewise require representative samples of natural biotypes, and the continuing search for useful chemicals and other products depends upon the preservation of sufficient habitat to ensure the existence of the various life-forms being studied.

What is legitimate visitor usage is difficult to determine. The simple observational pleasures of sightseeing, photography, nature study, and the enjoyment of walking or resting in pleasant bushland surroundings are acknowledged. To these can be added swimming, canoeing, and camping, where the nature of the park permits.

National parks do not cater for amusement forms of recreation to the extent of providing major sporting areas. Even where overnight accommodation is provided within a park, such artificial amusements are strictly limited. National parks are not playgrounds.

Queensland has developed a system of constructed tracks, carefully graded for easy walking. Visitors are not compelled to remain on these tracks but in general they do, simply because it is so much easier than walking anywhere else. Another development has been the establishment of interpretive on-park programs for national park visitors. These programs aim at interpreting the natural features of the park to the visitor so that the visit becomes a meaningful experience. Interpretive aids such as brochures, posters, and maps are also available to the public.

Great Barrier Reef Marine Park

The Great Barrier Reef Marine Park has been established to conserve the Reef; that is to allow for reasonable use to continue, while providing for public enjoyment and appreciation and the overall protection of the Reef. See page 24 for a detailed description of the Great Barrier Reef.

During the second half of 1983, five new sections were added to the Park which increased the proportion of the Great Barrier Reef Region included in the Park, from 14 per cent to 99 per cent. This made the Park the largest marine park in the world with an area of 345,000 square kilometres.

The Great Barrier Reef Marine Park Authority, which began operations in 1976, is required by the *Great Barrier Reef Marine Park Act 1975* to prepare zoning plans for areas that have been declared part of the Marine Park. Zoning plans form the basis of day-to-day management of the Park and are developed on the principle that enjoyment and use of the Reef should be encouraged, consistent with the conservation of the Reef's natural qualities.

Prior to the passing of the Act, there already existed a complex set of mechanisms which regulated human activity on and near the Reef. These included State and Commonwealth regulations on fishing, mineral exploration and recovery, boating and shipping, tourist operations, operations of ports and harbours, and the discharge of wastes from fixed installations and vessels.

The present strategy used to regulate activities in the Marine Park is the use of zoning plans and regulations. Zoning plans are designed to ensure a balance between human needs and the need to conserve the Great Barrier Reef and to separate conflicting uses. They allow multi-use of the Reef's resources but restrict or prohibit certain activities in specified areas.

Zoning plans are developed with the aid of extensive public input to ensure that the needs, desires, and knowledge of users of the Reef are taken into account. The Authority also utilises

information gathered through research and investigations undertaken by the Authority and by individuals and other organisations.

Oil drilling and the recovery of minerals is prohibited in the Park by the Act, and, to ensure that no drilling occurs within the Great Barrier Reef Region, regulations were introduced in September 1983 to prohibit oil drilling in the parts of the Region not included in the Park.

A Marine National Park Buffer Zone has been created in which the only fishing activity permitted is trolling from moving vessels. This was necessary in order to provide protection for many reefs while avoiding unnecessary restrictions on fishing activity, which is an important component of human use of the Great Barrier Reef.

The Queensland National Parks and Wildlife Service, which is responsible to the Great Barrier Reef Marine Park Authority for the day-to-day management of the Park, and other Queensland agencies co-operate in the establishment, control, care, and development of the Park.

The management role of the Service includes implementation of interpretive programs, monitoring (e.g. effects of visitor activities), surveillance (by aircraft and patrol vessels), and enforcement.

Wildlife

The distribution of fauna is a pattern subject to long-term and short-term changes. The climate of Queensland is such that populations may diminish alarmingly, for example during long periods of drought, and recover spectacularly soon afterwards.

At no stage in the history of direct exploitation of Queensland fauna have fears for the survival of species been substantiated. Results of recent zoological studies, the distribution ranges of the species involved compared with the distribution of hunters, and the protection from hunters afforded to a large proportion of the populations by habitat, landholders' requirements, and legislation, confirm the need primarily for continued monitoring of direct and indirect influences rather than mere prohibition of hunting.

The problems raised by exploitation of habitat are less reconcilable. Appreciation of the value of the natural environment in Queensland is rapidly increasing, as reflected by spreading agricultural development on the one hand, and by tourism on the other. Fauna is an integral part of this latter amenity. The problem of planning and conserving man's whole environment is receiving accelerated attention. Some aspects should be mentioned with particular regard to fauna conservation.

Reserves must be chosen to represent particular habitat types containing characteristic species. These are reservoirs from which the habitat outside may become re-populated when conditions are suitable. The nature of the countryside and the habits of the fauna demand that this limited number of reserves are of comparatively large area. Access by man to these must be strictly limited to avoid disturbance. Areas of less strict control—refuges where compatible land uses are encouraged and sanctuaries where account is taken of the need for movement of fauna and the current rights of existing landholders—must also be designated.

If conservation is to be an accepted philosophy, man must have access to fauna and some responsibility for the resource in his day-to-day life. People need to participate so that understanding and sympathy can develop. Controlled hunting and appropriate holding of fauna that is normally and demonstrably 'over-producing' are two of a wide range of these interests.

Natural history research, including taxonomy, for education purposes is one of the major responsibilities of the Queensland Museum, founded in Brisbane in 1855, which operates under the *Queensland Museum Act* 1970–1979. The Museum houses approximately 15,000 specimens

of reptiles, some 17,800 cabinet specimens of birds plus skeletons, eggs, and nests, and 6,700 specimens of mammals as an appropriate reference basis.

The State has adopted the koala, *Phascolarctos cinereus* (Goldfuss), as its faunal emblem.

8 PARKS FOR PRESERVATION AND PLEASURE

(Contributed by the Queensland National Parks and Wildlife Service)

This article is the first in a series describing National Parks—areas set aside for the preservation of features of particular ecological significance and for the general enjoyment of the public.

Witches Falls National Park

Twenty-two million years ago, which geologists consider 'relatively recent', the area now forming northern New South Wales and southern Queensland was dominated by a massive volcano centred over what is now Mount Warning, west of Murwillumbah. Lava from this volcano must have been very fluid for it spread with little fall over considerable distances—at least 50 kilometres in a northerly direction. With the ending of volcanic activity, other natural processes took over. Soil began to be formed, plants to grow, and with the passing of time the forces of erosion carved out the landscape we see today. Maps of the region show the upper reaches of the streams radiating like spokes of a wheel from the scarp of the caldera around Mount Warning.

One of the remnants of these lava flows in southern Queensland is the plateau known as Tamborine Mountain.

Authorities differ as to the meaning of Tamborine. The word Tamborine first appears on the map of a government surveyor in 1831 and was the name used for a run below the plateau taken up in the 1840s.

The Aboriginal tribes of the region had various names for the area, e.g. 'tcham bireen' meaning wild lime on a cliff, 'gum birin' meaning big cliff, and 'tam birin' meaning yam on a cliff. The yam reference is said to be to the yam vine which has edible tubers and which grows on Tamborine Mountain.

While its average elevation of 550 metres is not great, its length and breadth are such as to make it a landmark above generally flat land when seen from Southport 20 kilometres to the east, or Brisbane 55 kilometres to the north-west.

A mild climate, generous rainfall of more than 1,550 millimetres a year, and fertile basaltic soils produced a rich rainforest replaced in part by tall eucalypt forest able to tolerate the 'fire-stick farming' of the Aboriginal people, and with grassy open forest on the exposed flanks of the mountain.

Whether the Aboriginals of the region occupied the plateau is a matter for conjecture. A number of artefacts, stones, and implements not of mountain material prove Aboriginals did at least visit Tamborine. Their nomadic hunting style was more suited to open country, but a foray or two to prominent vantage points on the plateau edge, and maybe a hunting party into the forest when food was scarce, seem probable.

Fire would have been used to disturb game in the open forest areas but the flames would stop at the rainforest edge reinforcing the pattern of two distinct types of vegetation on the plateau.

While the dense rainforest offered obvious cover in the event of an attack by rivals, to spend a night in the rainforest was out of the question. Because of the altitude, even summer nights can

be quite cold and in winter frosts are common. Darkness falls early in the evening in rainforest and the Aborigines had no protection from the prickly, scratching, and stinging plants that are so common. Most importantly, the Aborigines were very superstitious and considered evil spirits and other dangers lurked in dim, dark places, such as the rainforest.

A theory has been advanced that a race of relatively small-statured Aboriginal people first colonised Australia and a later influx of larger people forced them to take refuge in areas of rainforest. It may never be known if this did happen, but the difficulties of lighting or maintaining a fire within a rainforest would be immense and life without a fire for warmth and cooking would have been unpleasant to say the least.

In the 1840s timber-getters were attracted to the cedar and beech growing in the area. Settlers in the 1870s found access to the plateau difficult and often impossible. Landholders who applied for leases in 1875 put great effort into clearing their land and timber-getting was tried as a means of earning a living, along with growing a variety of crops. Even those who managed to make small clearings in some of the most dense rainforest in south-east Queensland found little sunlight reached the fertile soil, and crops were poor.

The establishment of a steam-powered sawmill, although not economic, led to the building of a road to Coomera, which was suitable for bullock teams. In 1888, a water-powered sawmill was built on Cedar Creek, a short distance above what is now known as Curtis Falls, to mill cedar, beech, bollygum, pine, and hardwood. Poor prices, lack of demand, and lack of water in the 1901–02 drought forced the mill to close.

Few people lived on the mountain, and there were insufficient children to keep a special provisional school going for more than a few months in 1893.

Life really was a struggle as the landholders sought to gain a living from the land they were continuing to clear. Rainforest logs by themselves burn poorly. Only in mass do they burn well. By the turn of the century, citrus, stone fruits, and dairying offered new hopes of adequate return for effort.

St Bernard's was the first guesthouse on the mountain (1889) and this was followed by Yuulong at North Tamborine. The mountain's third and best known boarding house, Capo di Monte, was started in 1898 at North Tamborine by William Felix Geissman, a Swiss, and his German wife. He was also a farmer and ran dairy cows along the western side of the plateau.

Geissman cut tracks through the rainforest to let his cows reach patches of grass in the open forest which occurred on shelves on the mountain side. A small creek provided water, and this tumbled over a shelf edge in the west to Canungra Creek and the Albert River.

Without fences, the cows roamed seeking the natural grasses and it was the children's job in the late afternoon to bring in the cows for milking. One can imagine on a cold misty winter's afternoon what a difficult job that was for child and beast. 'Some nights we were late and bringing them over the creek near the falls was very eerie', Mrs Hilda Curtis recalled some 70 years later. The children had been introduced to the witches, hobgoblins, ogres, and griffins of Grimm's Fairy Tales. 'The small creek had very steep banks and slippery red soil and in the dark it was hard to get the cows across it. We were scared on many nights and we called it the Witches Falls.'

At the foot of the mountain, a little to the west, Robert Martin Collins looked out from his Tamrookum property. He had visited the United States in 1878 and had become very impressed by the movement that led to the declaration of such outstanding natural areas as Yellowstone, Yosemite, and Sequoia as 'national parks'.

In Australia, national park protection had been offered to Royal National Park, near Sydney, in 1879.

Collins was elected to the Legislative Assembly of Queensland and two years later to the presidency of the Royal Geographical Society of Australia, Queensland Branch. Numerous letters, memoranda, and copies of addresses attest to his dedication in bringing a new type of land dedication for the benefit and enjoyment of the people. He had the vision of a national park, particularly along the McPherson Range to the south of his home, but his ideal had few supporters.

Who wanted to reserve forever unknown and isolated land that might one day be wanted for agriculture? To make the hurdle impossible, there was no law in Queensland that would allow the declaration of a national park.

Collins kept pressing his point and helped make arrangements where competent government officers could inspect land and make recommendations.

On 7 November 1906, 'an Act to Provide for the Reservation Management and Protection of State Forests and National Parks' was introduced into Parliament and debated. For what today seems a momentous occasion, the event passed almost without reference in the most authoritative account of the major business of Parliament of the time. On 14 December 1906 the Act was assented to, and became effective on 1 January 1907.

The national park ideal had become a part of Queensland law. Argument raged over whether the McPherson Range should become national park. At Tamborine Mountain, there was no question.

At a meeting of the Tamborine Shire Council on 15 June 1907, Councillors S. Curtis and J. H. Delpratt moved and seconded a motion concerning an area of Crown land on the mountain's western slope 'that the Department of Public Lands be asked to resume this as national park for the preservation of the flora and fauna, as owing to the way the land in the vicinity is being cleared it would seem that in the near future such an action would prove its necessity'.

The resolution was recommended by the Lands Commissioner and the Director of Forests 'for the permanent protection to the fauna and flora of this interesting district'.

On 28 March 1908 the national park at Tamborine Mountain was gazetted.

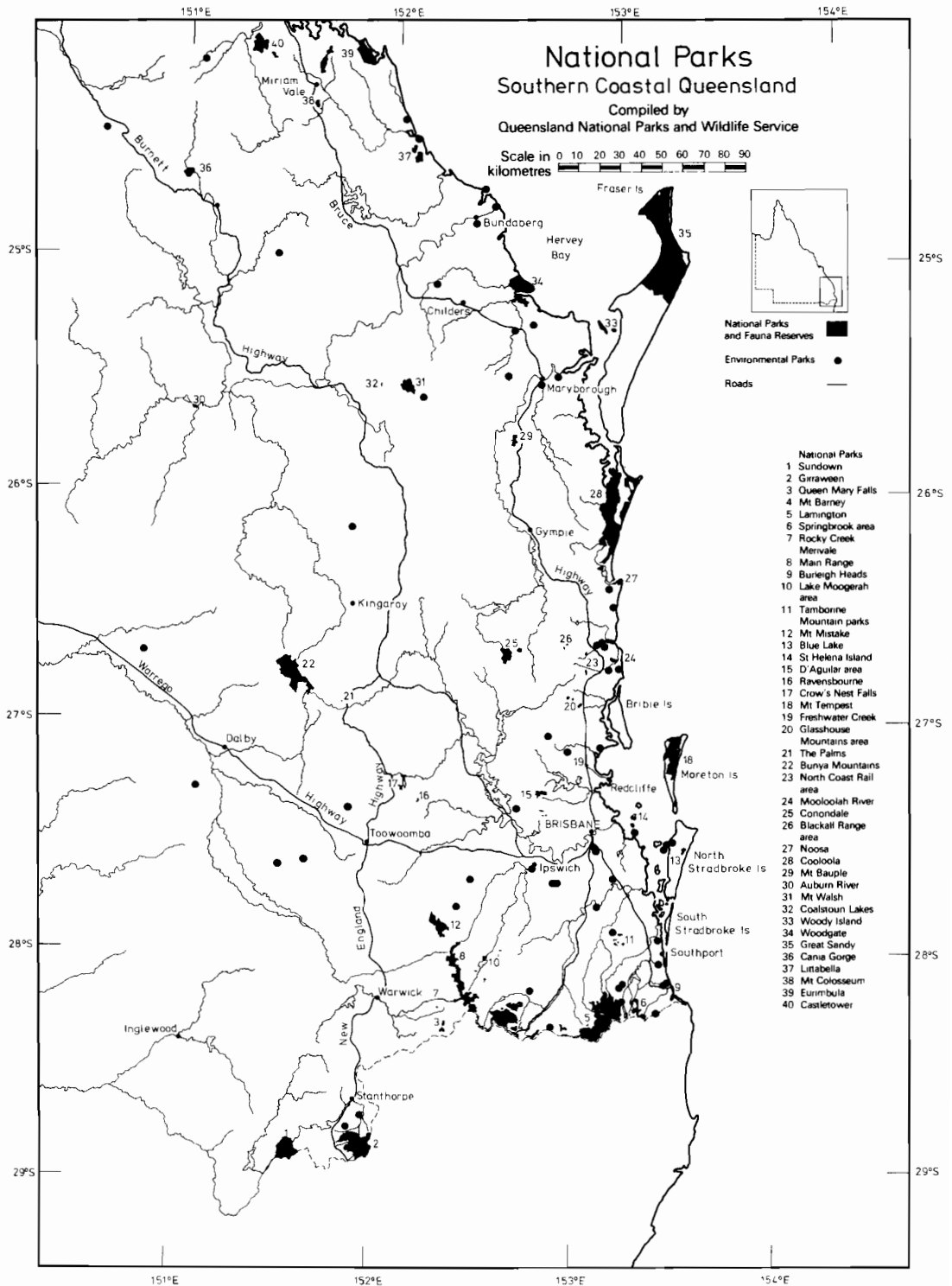
Its area, 131 hectares, was far from large for a State the size of Queensland. But it was land in its natural state, and Messrs Collins, Curtis, Delpratt, and other Tamborine residents could be proud that this was a lead for Queensland. In fact, the government had intended the Bunya Mountains National Park of 9,100 hectares to be declared first, but this had to take second place some six months later.

Seventy-five years later, Witches Falls National Park, National Park 441 by official number, is largely as it was in 1908. The rainforest with the more open forest and all that implies—the ferns, orchids, shrubs, grasses, mosses, and so on—is preserved. When such habitats are maintained, so is the wildlife.

If such untouched land were offered today, there is no doubt it would be eminently suitable for a national park. Without the 1908 declaration, much of what is now parkland would have been cleared.

In the 1980s, road access, picnic tables, shelters and fireplaces, graded walking tracks, and signs assist the many visitors in their recreational activity in the park. But the prime purpose of the Queensland National Parks and Wildlife Service, the park's management authority, is conservation. Recreation is a secondary goal.

In 1908 no team of scientists would have been able to examine the park and identify its many species of flora and fauna. Even today any listing would be incomplete, but as scientific knowledge grows and equipment improves, such records will become possible.



Witches Falls National Park was recognised as an entity of nature, and not because of the many species it contained. That is how the land is preserved today. Officers of the National Parks and Wildlife Service check the park regularly and consider how the park as a whole should be best managed.

Witches Falls National Park is off Tamborine Mountain Road, North Tamborine and is 12 kilometres from Canungra, and 77 kilometres from Brisbane, via Tamborine Village.

9 THE GREAT BARRIER REEF

(Contributed by R. Endean, M.Sc., Ph.D.)

Often regarded as the Eighth Wonder of the World, the Great Barrier Reef is an assemblage of coral reefs situated on a platform that is submerged in shallow water off the tropical north-eastern coastline of Australia. This assemblage constitutes the largest single collection of coral reefs that has ever existed on this planet. Coral reefs are rigid structures formed from the skeletal remains of corals and associated organisms that secrete lime. Usually these remains become associated with fine detritus and are ultimately compacted to form limestone. A veneer of living organisms known as the coral reef community grows on the skeletal remains, hiding, if present, the limestone core of the reef. These limestone cores may extend over many hectares and may be up to hundreds of metres in thickness.

The shallow-water platform where the reefs of the Great Barrier Reef are found came into existence some 28 million years ago at the beginning of the Miocene period. During subsequent millenia the whole region underwent slow subsidence leading to the 'drowning' of the adjacent coast. Corals flourished in the region and, at locations where conditions were favourable, coral reef communities grew upwards towards the sea surface from the sinking ocean floor of the platform. By the beginning of the Pleistocene period, about a million years ago, the major reef zones of the Great Barrier Reef were established and were much as they are today. There then occurred the Pleistocene lowerings of sea level caused by the locking up of water in extensive ice caps, especially in polar regions. As a result, water drained from the platform exposing the reefs to sub-aerial erosion for extended periods. When the seas finally returned some 10,000 years ago as the Pleistocene ice caps melted, the eroded remnants of the former reefs provided the solid substrates required for the development of new coral reef communities. These grew vertically as the waters rose but did not keep pace with the rising water level which stabilised some 6,000 years ago. Because their basements were often at different depths the vertically-growing reefs reached present sea-level at different times over the last 6,000 years. However, the numbers, positions, shapes, and sizes of the new offshore reefs were governed by the numbers, positions, shapes, and sizes of the eroded surfaces of the old reefs on which they grew. As the waters rose they spread over the adjacent continental coast, isolating the tops of mountains which became islands. Inshore coral reefs, called fringing reefs, grew around the shores of these islands and on the mainland coast itself at some localities. Thus there are in the Great Barrier Reef region today numerous coral reefs and islands scattered over a distance of nearly 2,000 kilometres. For much of this distance a well-defined channel, much used by shipping, separates the offshore reefs from the inshore continental islands and fringing reefs.

The Great Barrier Reef region can be defined as that region of the continental shelf of eastern Queensland which lies north of Fraser Island. Bramble Cay, just south of Papua New Guinea, marks the northern limit of the region. To the west the boundary is the Queensland mainland coastline except in Torres Strait where the western boundary can be placed conveniently at 142 degrees 30 minutes east longitude. To the east the platform extends to the 100 fathom line. The distance of this line from the Queensland coast varies from about 13 kilometres at Cape Melville in the north to about 240 kilometres at the Swain Reef complex in the south. The whole Great Barrier Reef region occupies an area of about 250,000 square kilometres.

Most of the offshore reefs are platform reefs which range in size from about 2 kilometres to 20 kilometres in their greatest horizontal direction. South of 16 degrees south latitude they are scattered over the offshore platform but tend to cluster along the eastern edge of the platform east of the Whitsunday Islands area and form a labyrinthine maze at the Swain Reef complex near the southern end of the Great Barrier Reef.

At the sea surface platform reefs are often oval or crescentic in outline with their long axes set athwart the prevailing south-easterly trade winds. Several regions are usually recognised on each reef. There is a windward reef slope rising sometimes gently, sometimes abruptly, from the sea floor, a windward reef crest (sometimes surmounted by boulders and often with an associated rubble zone), a reef flat usually ranging from 100 metres to 400 metres in width, a leeward back-reef zone of coral rubble and coral pinnacles, and a leeward reef slope. Sometimes a lagoon occurs in what would normally be the back-reef area. The presence or absence of a lagoon on a particular reef is bound up with the development of that reef. During its formation each offshore reef grew vertically from an antecedent eroded reef. Fragments of coral skeletons and the remains of other lime-secreting organisms together with detritus and fine sediment were caught up around the bases of corals and other sedentary organisms. Accumulation and consolidation occurred as the reefs extended vertically. When they neared the sea surface the coral communities came under the influence of wave action. The windward sections of the reefs were then subjected to erosion but were stabilised to some extent by the cementing action of coralline algae. A hard surface was formed which acted as a breakwater enabling some growth to occur on the lee side. In effect, the reef grew downwind. Sometimes, the ends of a reef projected downwind as cusps and it is believed that where a sufficient area of shallow substrate was available, the cusps grew together so forming a lagoon. Alternatively, lagoons could have arisen as a result of large depressions being present in the antecedent eroded reefs. Irrespective of its origin, the degree of infilling and hence the depth of a lagoon is influenced by the state of maturity of the reef carrying it. After a reef reaches the sea surface, calcareous sediments, formed by fragmentation of the limy skeletons of corals and many of their associates, are moved across the surfaces of reefs from the windward to the leeward side. They may accumulate to some extent in shallow water on the lee side, thereby increasing the size of the reef and filling any lagoons that may be present. The capacity for reef growth in this way is limited, however, and most sediments appear to be swept away from reefs and to be deposited ultimately in deep water. In most cases reef construction appears to be in equilibrium with reef destruction in Great Barrier Reef waters. About 1,300 platform reefs can be recognised on charts of the Great Barrier Reef.

North of 16 degrees south latitude platform reefs form an inner series of offshore reefs. In this northern section three other types of reefs form an outer series. The most common type of reef in this outer series is the ribbon reef. Reefs of this type range from 5 kilometres to 25 kilometres in length and from 300 metres to 500 metres in width. They have recurved ends and their long axes parallel the edge of the Continental Shelf. Adjacent reefs are separated by narrow passages. About 130 ribbon reefs form an almost continuous belt north of Cairns in the region extending from about 16 degrees south latitude to 11 degrees 14 minutes south latitude. In the Torres Strait region, between 11 degrees 14 minutes south latitude and the northern tip of the Great Barrier Reef, ribbon reefs are replaced successively in the outer series by so-called deltaic reefs and by so-called dissected reefs in the extreme north.

In total, there are about 1,500 offshore reefs and about 1,000 fringing reefs in the Great Barrier Reef region. Indeed only about one-tenth, approximately, of this whole region is actually occupied by coral reefs. Hundreds of islands occur in the Great Barrier Reef region. Some of these islands, known as coral cays, are found on platform reefs. These cays are formed from aggregations of rubble and coral sand heaped up above low water level by the action of winds and currents. Some are no more than mounds of such material and they shift position at times. Others are more permanent structures and they have acquired a cover of grasses, shrubs, and/or trees. A few cays have extensive forests of trees, notably *Pisonia* trees, and a few cays in the

northern section of the Great Barrier Reef carry mangroves. Coral cays often provide resting and nesting sites for sea-birds, such as terns and gannets, which wheel overhead in thousands when disturbed by human intruders. Female turtles, particularly green and loggerhead turtles, come ashore on some cays during the warmer months in order to lay their eggs. Tourist resorts have been set up on two of these cays, Heron Island, in the Capricorn Group near Rockhampton, and Green Island, near Cairns.

Often the continental islands occur in clusters such as the Cumberland Islands and the Keppel Islands. Some continental islands are merely emergent rocks, others such as Hinchinbrook Island are large masses of land. Some rise precipitously from the waves, others slope gently into the sea. Some are dotted with tropical jungle, others have only a few stunted shrubs and are bare of trees. Their geology is similar to that of the adjacent mainland of which they were once a part. Several tourist resorts have been established on continental islands. In the extreme northern end of the Great Barrier Reef volcanic activity has been responsible for the formation of islands, such as Darnley Island and the Murray Isles.

The living cover of animals, plants, and micro-organisms that constitutes the coral reef community found on reefs of the Great Barrier Reef region exhibits a number of characteristic features. In the first place most coral reef organisms are stationary, or almost so. Indeed, groups such as algae, corals, soft corals, gorgonians, anemones, sponges, bryozoans, and ascidians that form the basic cover of reefs are sessile, being attached to the sub-stratum when adult. Most of the sessile organisms present are also colonial. The majority of non-sessile organisms present are either sedentary, like most coral reef molluscs and echinoderms, or site-attached, like most coral reef fishes.

Another feature of the coral reef community is the predominance of corals, algae, and fishes among the macroscopic groups represented. Hard corals are, of course, pivotal in coral reef communities. They are primarily responsible for the establishment of the coral reef community and they provide shelter and sometimes food for numerous other animals. Their calcareous skeletons provide much of the material of which coral reefs are composed. Many species of hard corals have adopted a branching growth form which often results in the formation of tree-like structures or mesh-like tables. However, some coral species have adopted an encrusting habit, a few form vase-like structures, and a large number form hemispherical or mound-like structures. Many of the hemispherical species (so-called massive species) are of great antiquity being hundreds of years old. Marine algae are also of basic importance in coral reef communities. They provide a source of energy and nutrients for many other coral reef organisms. Indeed, microscopic algae known as zooxanthellae which live in the tissues of corals play a major role in providing energy for their hosts. They also facilitate deposition of the calcareous skeletons of corals. Some algae possess calcareous skeletons. These calcareous algae form a smooth hard surface to the reef front and stabilise it against erosive forces. Then too, the remains of calcareous algae are prominent in reef sediments. Coral reef fishes show a great variety of shape, size, and colour. Many species are brightly coloured, often gaudy. As they dart among coral colonies or nestle in the interstices of branching corals they bear a resemblance to the birds of a rainforest. The great majority of coral reef fishes are carnivorous but there are a few algae-eating groups such as surgeon fishes (Acanthuridae), parrot fishes (Scabridae), and rabbit fishes (Siganidae).

Perhaps the most striking feature of the coral reef community is its species richness. This richness is well exemplified by the results of recent studies of some animal groups at Heron Island Reef in the Capricorn Group. At least 38 species of starfish, 32 species of brittle-star, 21 species of sea-urchin, 36 species of holothurian, 27 species of feather-star, 107 species of coral, and 931 species of fish have been noted on the reef which occupies an area of 36 square kilometres. Hundreds of other species of animals and plants are also present. One of the reasons for the remarkable species richness exhibited is the co-existence in the community of large numbers of rare species. These species are normally long-lived and are often highly specialised in various

ways. Some possess specialised anatomical, physiological, and behavioural features which help them pursue their life strategies. Many of these species appear strange to the human observer and coral reef organisms generally are noted for their unusual, often bizarre, appearance. For example, giant clams (*Tridacna* spp.) lying with their shells agape and their fleshy mantles exposed, the flamboyant butterfly cod (*Pterois* spp.), the armoured pin cushion starfish (*Culcita novaeguineae*), the strange slate pencil sea urchin (*Heterocentrotus mammillatus*), the peacock worms (*Spirobranchus giganteus*), or the grotesque crab *Daldorfia horrida* cannot fail to arouse attention.

Frequently reef species are specialised to live in close association with other species giving rise to the large number of commensal forms such as gall crabs, coral shrimps, and anemone fish and to the numerous parasitic forms such as flat worms and round worms that live in or on the fishes and other animals of coral reef communities.

A large number of coral reef organisms are toxic. Indeed there are more toxic species in the coral reef community than in any other community. Toxicity is used by many sessile organisms such as soft corals, hard corals, and sponges to acquire and maintain living space and to resist encroachment by other sessile species. Toxins are also used to deter predators as in the cases of some anemones, some nudibranch molluscs (e.g. the Spanish dancer, *Hexabranchus sanguineus*), and some fishes such as stonefishes (*Synanceja* spp.). Sometimes toxins are used offensively to obtain food as in the case of the molluscs known as cone shells (Conidae) and in the case of sea snakes (Hydrophiidae).

During the development of coral reef communities predators able to deal with the defensive toxins of other species evolved. In this way many of the specialised predator-prey relationships so characteristic of coral reef communities arose. Thus the giant triton, *Charonia tritonis*, can detoxify the potent saponins that normally protect reef starfishes from predators, the giant helmet, *Cassia cornuta*, is able to cope with the venomous spines of the needle-spined sea-urchin, *Diadema setosum*, and the egg cowry, (*Ovulum ovum*), is able to eat the polyps of the poisonous soft coral, *Sarcophyton trocheliophorum*. Another feature of predator-prey relationships involving coral reef animals is that only portions of the bodies of some animals (e.g. brittle-stars, crabs, and some worms) or portions of the colonies of colonial animals such as hard corals, soft corals, sea-fans, etc. are eaten. Mutilated animals frequently regenerate the missing parts of their bodies. Missing parts of colonies are also regenerated.

Coral reef species belonging to sedentary groups such as molluscs and echinoderms have been shown to possess a marked constancy of population numbers with time. This constancy of population numbers may extend to other animal groups, particularly sessile species such as species of massive corals, and be responsible for the apparent stability or predictability of coral reef communities that have been commented on by numerous biologists.

The numbers of some species of corals, particularly many species of branching corals and many species of algae, may vary markedly with time. Such species are often called opportunists. They are short-lived, have a high turnover rate, and rapidly colonise any space that is created by disturbances, such as cyclonic storms which cause coral mortality. In this respect the opportunists can be regarded as pioneer species in the re-occupancy of space. Sometimes opportunists dominate areas, particularly areas that are subjected to repeated disturbances. In the absence of such disturbances the pioneer species are, to a large extent, gradually replaced by the rarer specialist coral reef species. Although there is some variation in the relative abundances of constituent species from reef to reef throughout the Great Barrier Reef region, depending upon the geographical position of a reef and the physico-chemical conditions operating there (including the severity and frequency of disturbances causing coral mortality), the species composition of the coral reef community is remarkably constant throughout the region. At the same time it might be noted that the species composition of the coral reef community is markedly different from the species compositions of other types of communities found on the sea floor

among coral reefs. Also, it should be noted that physical factors, such as water depth, degree of exposure to wave action, degree of oxygenation of water, etc., coupled with the range of physiological tolerance exhibited by each species, determine the broad-scale distribution of species on reefs.

Most reef organisms release reproductive products (eggs or larvae) into the water. Because of the large number of filter-feeding and plankton-feeding animals found on a coral reef, the reproductive products are subject to intensive predation if they remain in the water over a reef. Consequently many coral reef animals time the release of pelagic eggs and/or larvae to coincide with ebbing spring tides. This ensures that a high percentage of propagules will pass to oceanic waters surrounding reefs where their subsequent development occurs. After development is completed settlement may be long delayed until the propagules are carried by currents to reefs. Alternative strategies are to produce eggs in adhesive masses which adhere to the sub-stratum near their parents or to brood the young stages, releasing these when they have reached an advanced stage of development.

Because many species of coral reef animals are rare, difficulties arise in finding a mate. This difficulty has been overcome in various ways. One of the more interesting is the sex change that occurs in some fishes. In wrasses and parrot-fishes the change is from female to male, in anemone-fishes the reverse change may occur. Then again, a large number of coral reef animals reproduce asexually. For example, the common black reef holothurian, *Holothuria atra*, divides into two by transverse fission; each half then grows the required organs. The starfish, *Linckia multifora*, breaks off arms each of which grows into a new starfish. Many branching corals, such as *Acropora aspera*, fragment during storms and each fragment has the potential to grow into a new coral colony. Then again, some animals are hermaphrodite and can act both as males and females.

Coral reef communities are subjected naturally to a number of destructive agencies some of which are physical, some biological. Probably the most important of these physical agencies are cyclonic storms. Excessive sedimentation, prolonged emersion at low tide, and prolonged exposure to water of reduced salinity are also significant. Among the biological agencies, predation by animals is important. A number of animals, particularly certain fishes, crabs, gastropod molluscs, the starfish *Acanthaster planci*, and the starfish *Culcita novaeguineae* prey on coral polyps. Also, the activities of boring and abrading organisms and the various competitive interactions for space that occur among members of the coral reef community result in the deaths of coral polyps. Localised destruction of corals and other members of the coral reef community, owing to the operation of natural agencies, occurs intermittently on most reefs of the Great Barrier Reef but the damage inflicted is soon repaired by the rapid settlement and growth of new coral colonies.

Much more serious are the effects of a large number of human activities such as dredging and filling, land clearance near shorelines, release of pollutants, and overcollecting of species of reef animals that occupy key positions in food webs which result in extensive damage to coral reef communities.

Under the *Great Barrier Reef Marine Park Act 1975* an Authority was set up to recommend areas of the Great Barrier Reef to be included in a Great Barrier Reef Marine Park (see page 18). The whole of the Great Barrier Reef except the extreme northern end in the Torres Strait region has now been included in the Great Barrier Reef Marine Park.

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Chapter 2

CLIMATE AND SEASONS

1 LIVING CONDITIONS

Queensland has a typical sub-tropical to tropical climate, which has proved itself suitable for settlement in all parts of the State. High daytime temperatures are a normal feature of the period from October to March, resulting in quite a short spring and a long summer. Temperatures increase fairly rapidly in September and October and many days exceeding 40°C are experienced in inland areas even before the official commencement of summer on 1 December. Living conditions, however, are not as uncomfortable as they might appear because the higher temperatures of the inland areas are associated with lower humidities.

On the coast, the sea breeze, which is an almost daily phenomenon, tempers conditions considerably but the humid conditions in summer on the tropical coast (north of Rockhampton) are nonetheless enervating.

As an indicator of the normal duration of uncomfortably hot weather, the average number of days a year on which maximum temperatures exceed specified values are listed below.

	Over 30°C	Over 35°C	Over 40°C
Brisbane	47	3	less than 1
Townsville	125	3	less than 1
Charleville	143	80	5
Mount Isa	224	129	28

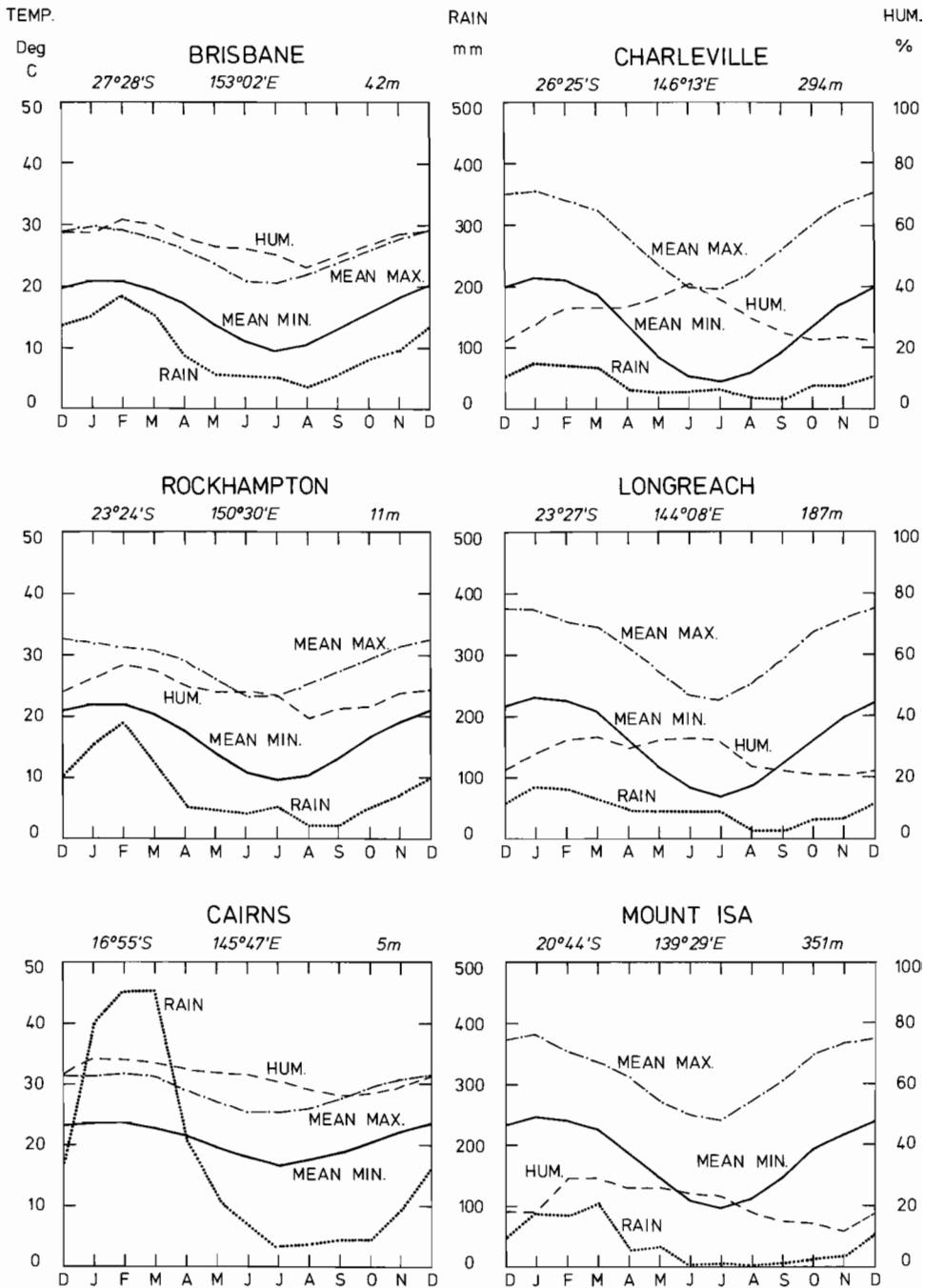
Day temperatures in the winter are quite mild, and, with the decreased cloudiness, make for the pleasant weather which is so attractive to tourists from colder climates, as few other settled areas of Australia experience such a mild winter. Living conditions from May to September can be described as climatically ideal with sunny days and temperatures in the low- to mid-twenties. The abundance of sunshine in the winter months is demonstrated by a comparison of the average number of sunshine hours a day during June to August, at the Australian Capital Cities, as follows: Melbourne, 3.9; Hobart, 4.4; Adelaide, 4.6; Canberra, 5.4; Perth, 5.5; Sydney, 6.2; Brisbane, 7.2; and Darwin, 10.0.

The drier air of the winter months in Queensland is conducive to cold nights, particularly in the southern interior where night temperatures often drop below 5°C and widespread frosts are experienced.

2 METEOROLOGY

Data for six typical stations in abridged form, and for Brisbane in more detail, are given in the following tables.

METEOROLOGY OF TYPICAL STATIONS—QUEENSLAND



The graphs show, according to the scales, monthly means of (i) maximum daily temperature, (ii) minimum daily temperature, (iii) relative humidity at 3 p.m. daily, and (iv) total rainfall. The means shown for temperature and humidity are for the period 1957–1973; the means shown for rainfall are for all years available. Also shown is the latitude, longitude, and height above sea level of each reporting station.

METEOROLOGY FOR SIX TYPICAL STATIONS
(Source: Bureau of Meteorology, Brisbane)

Month	Mean maximum daily temperature (deg C)		Mean minimum daily temperature (deg C)		3 p.m. relative humidity (%)		Rainfall (mm)	
	1982	Average (a)	1982	Average (a)	1982	Average (a)	1982	Average (b)

BRISBANE (SOUTH COASTAL)

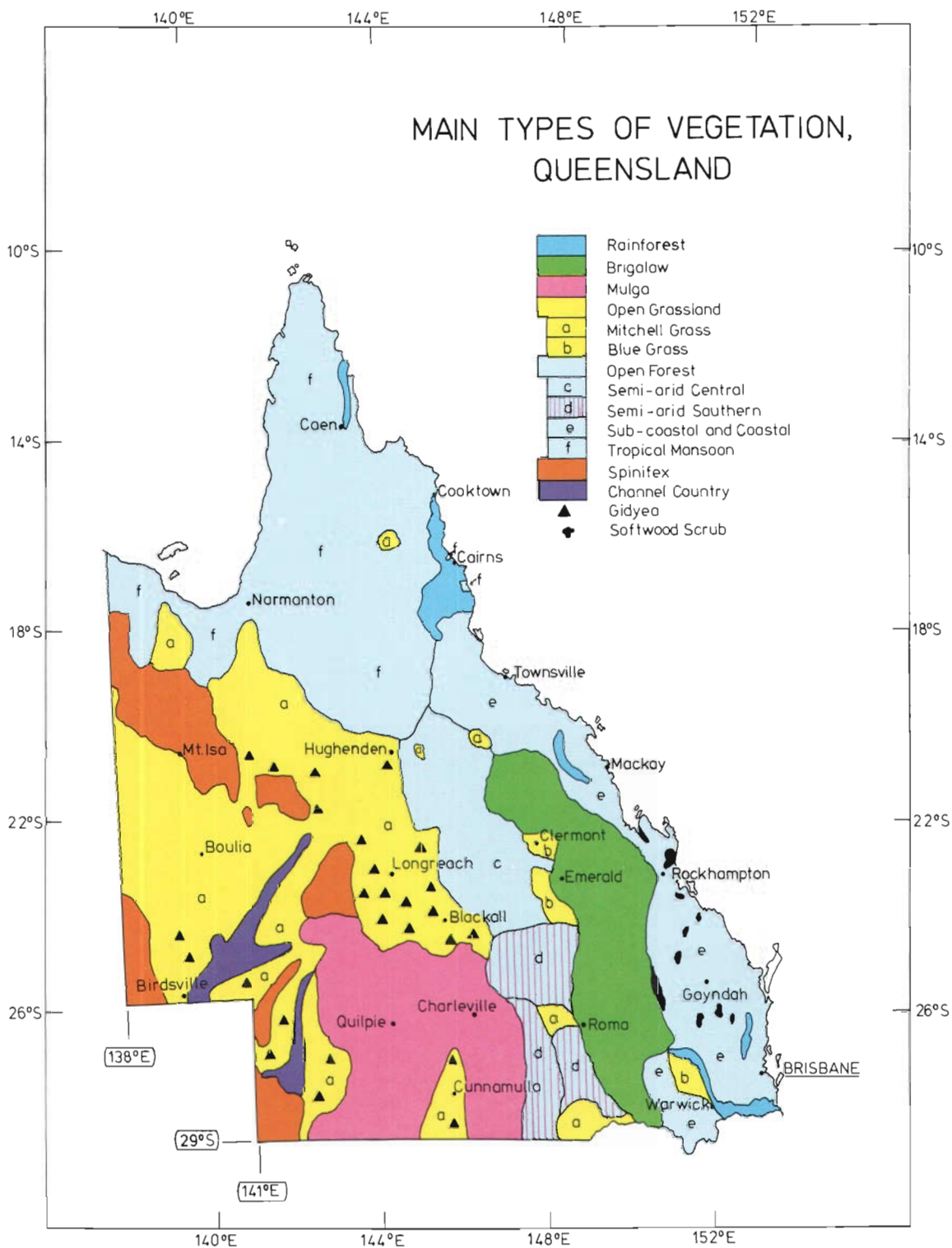
January	29.7	28.9	22.6	20.9	62	57	227	166
February	29.8	28.9	21.7	20.8	58	58	117	163
March	28.9	27.9	21.1	19.4	60	56	153	146
April	26.5	26.3	17.3	17.1	53	52	62	86
May	24.6	23.4	14.3	13.6	47	48	85	71
June	21.0	21.2	10.0	11.5	42	49	3	68
July	20.9	20.4	9.3	9.8	38	43	6	56
August	22.1	21.9	12.0	11.0	49	42	21	46
September	24.1	24.0	14.0	13.3	48	44	71	48
October	25.5	25.9	15.4	16.3	50	50	106	75
November	27.1	27.6	18.5	18.4	56	52	9	97
December	29.0	28.5	20.8	19.9	61	56	182	130
Year	25.8	25.4	16.4	16.0	52	51	1,042	1,151

ROCKHAMPTON (CENTRAL COASTAL)

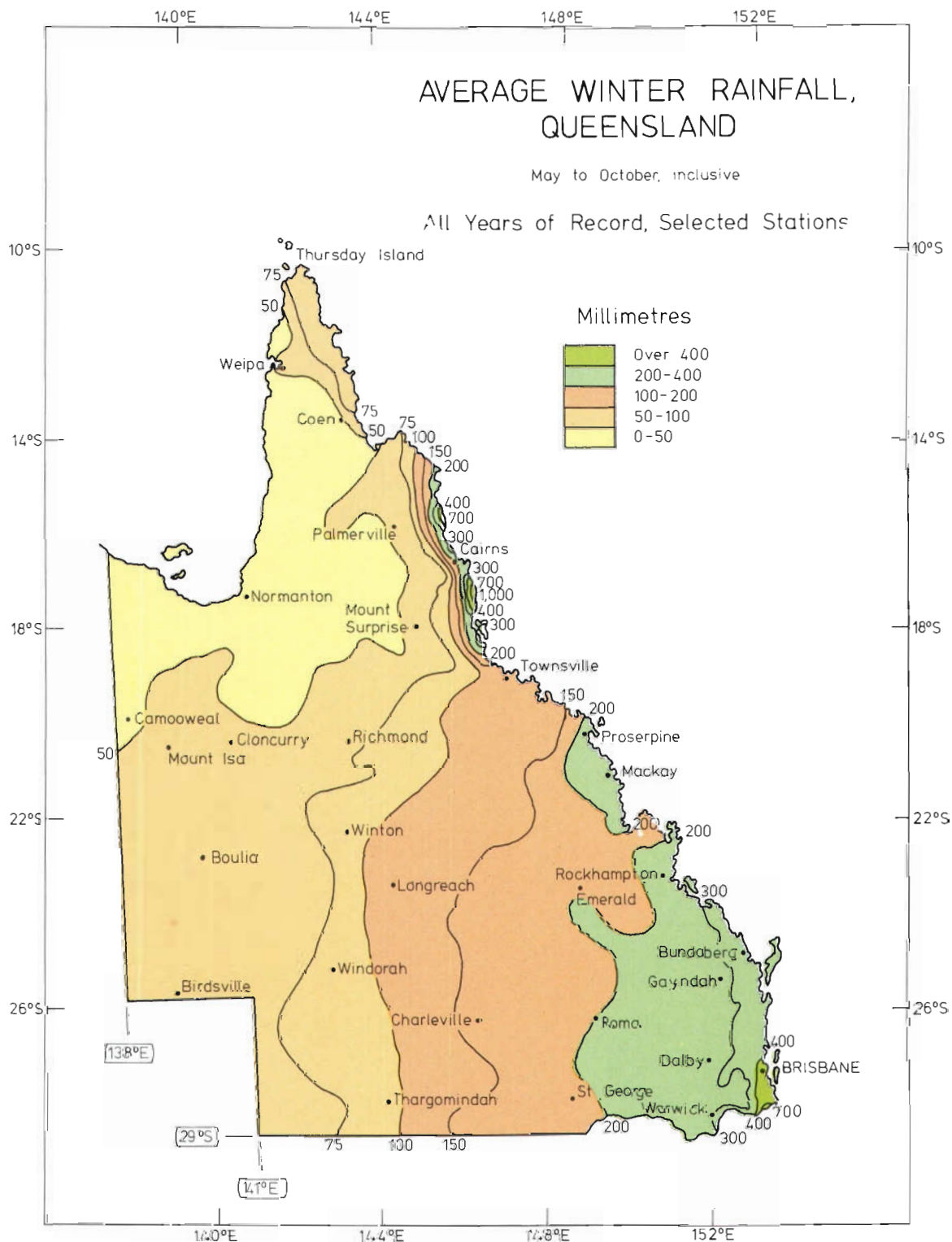
January	33.5	31.4	23.7	21.7	51	52	87	159
February	32.6	31.1	22.6	21.7	49	54	17	179
March	31.3	30.2	22.0	20.4	54	51	45	108
April	28.6	28.7	18.6	17.6	46	47	23	38
May	26.6	25.9	14.1	13.5	41	44	23	43
June	22.8	23.5	6.9	10.8	32	43	11	37
July	23.0	22.9	7.3	8.6	30	39	5	32
August	24.2	24.8	12.4	10.5	41	37	5	24
September	26.8	27.4	13.4	13.1	39	36	89	23
October	29.0	29.7	14.5	16.8	31	38	13	47
November	30.6	31.1	19.0	19.5	38	43	—	66
December	32.6	31.7	21.1	20.8	44	47	77	102
Year	28.5	28.2	16.3	16.3	41	44	394	858

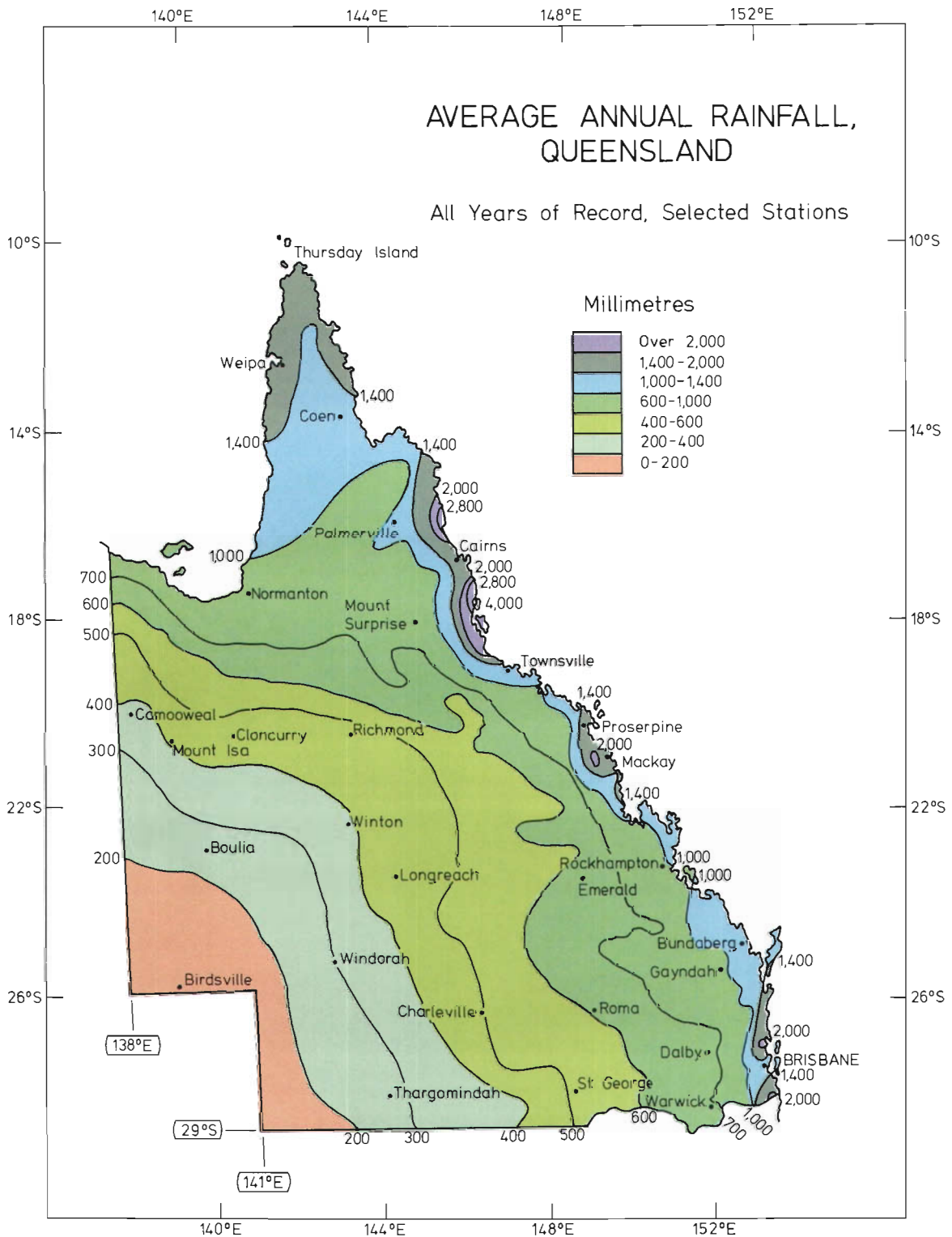
CAIRNS (NORTH COASTAL)

January	32.4	31.5	24.1	23.6	63	62	206	399
February	31.2	31.3	23.7	23.7	69	65	190	441
March	30.6	30.3	23.5	22.9	68	65	294	464
April	28.0	29.0	21.7	21.5	70	63	392	177
May	27.4	27.3	18.7	19.8	60	62	43	91
June	24.8	25.8	14.5	18.1	52	59	15	51
July	24.8	25.4	15.0	16.7	51	56	11	30
August	24.8	26.6	17.2	17.6	59	54	81	26
September	27.0	27.9	17.9	18.7	56	52	18	36
October	28.1	29.4	17.7	20.5	52	53	4	35
November	29.5	30.6	20.7	22.4	58	57	93	84
December	31.6	31.3	22.8	23.3	63	59	100	167
Year	28.3	28.9	19.8	20.7	60	59	1,447	2,001



November to April, inclusive





METEOROLOGY FOR SIX TYPICAL STATIONS—*continued*

Month	Mean maximum daily temperature (deg C)		Mean minimum daily temperature (deg C)		3 p.m. relative humidity (%)		Rainfall (mm)	
	1982	Average (a)	1982	Average (a)	1982	Average (a)	1982	Average (b)

CHARLEVILLE (SOUTH INLAND)

January	36.6	34.6	23.5	21.2	28	27	65	78
February	36.5	34.3	23.9	21.2	23	30	1	72
March	30.3	31.6	20.5	18.5	46	31	116	75
April	28.8	28.3	15.0	13.9	29	31	6	34
May	23.8	22.8	7.8	8.2	27	35	13	28
June	18.8	20.3	1.8	5.2	26	38	1	19
July	18.9	19.4	0.7	3.5	24	35	1	25
August	24.2	21.7	7.4	5.5	22	29	—	21
September	25.3	25.8	9.6	9.3	19	23	8	24
October	29.9	30.2	12.7	14.3	13	21	9	41
November	35.3	32.9	19.4	17.6	11	20	1	40
December	36.8	34.3	21.9	19.8	15	23	25	58
Year	28.8	28.0	13.7	13.2	24	29	245	515

LONGREACH (CENTRAL INLAND)

January	39.3	37.9	24.4	22.7	29	26	60	66
February	38.2	35.9	23.9	22.8	24	35	19	85
March	33.9	34.2	21.8	20.1	37	32	76	64
April	32.0	31.5	17.7	16.1	n.a.	31	7	29
May	28.1	26.1	10.6	11.2	21	36	1	23
June	22.6	24.1	4.0	8.3	20	32	—	21
July	22.7	23.8	3.9	6.8	17	28	—	19
August	26.6	26.8	9.6	9.0	21	21	—	9
September	29.3	29.7	11.8	12.1	n.a.	21	—	13
October	33.3	34.1	14.1	17.0	n.a.	17	—	25
November	36.7	36.4	20.8	19.0	15	20	3	28
December	39.5	37.4	22.7	21.3	16	20	7	56
Year	31.9	31.4	15.4	15.5	n.a.	26	173	436

MOUNT ISA (NORTH INLAND)

January	38.5	38.1	23.8	24.7	27	18	105	86
February	35.9	35.4	22.8	24.0	34	29	192	84
March	33.3	33.8	21.4	22.6	37	29	29	103
April	32.4	31.2	19.2	18.9	24	26	1	29
May	28.5	27.1	12.0	14.3	19	26	—	32
June	23.9	25.1	7.4	10.8	23	24	—	1
July	23.5	24.3	5.0	9.9	18	23	—	6
August	26.9	26.9	11.9	11.1	22	18	—	2
September	29.6	30.2	12.3	14.4	17	15	1	6
October	33.3	34.9	14.6	19.4	10	14	1	14
November	36.7	36.6	22.0	21.8	19	12	12	18
December	38.6	37.2	21.9	23.3	20	18	25	48
Year	31.8	31.7	16.2	17.9	23	21	367	429

(a) Averages shown are for the period 1957–1973.

(b) Averages shown are based on all years of record.

METEOROLOGY, BRISBANE, 1982

Month	Mean daily hours of sunshine	Corrected mean sea level pressure 9 a.m.	Shade temperature					Rainfall		
			Mean	Absolute maximum	Absolute minimum	Mean maximum	Mean minimum	Total	Wet days (a)	Average (b)
	No.	mb	deg C	deg C	deg C	deg C	deg C	mm	No.	mm
January	6.4	1,012.1	26.1	36.8	19.5	29.7	22.6	227	14	166
February	7.3	1,014.9	25.7	35.9	19.2	29.8	21.7	117	15	163
March	7.2	1,015.7	25.0	32.7	18.9	28.9	21.1	153	16	146
April	8.1	1,019.7	21.9	30.4	12.3	26.5	17.3	62	11	86
May	7.3	1,021.3	19.5	28.4	11.0	24.6	14.3	85	10	71
June	9.1	1,020.6	15.5	24.0	5.7	21.0	10.0	3	2	68
July	8.0	1,021.0	15.1	23.3	6.1	20.9	9.3	6	4	56
August	7.6	1,028.3	17.1	26.5	6.3	22.1	12.0	21	13	46
September	7.9	1,020.6	19.1	33.8	8.5	24.1	14.0	71	10	48
October	10.1	1,017.8	20.5	29.2	11.5	25.5	15.4	106	6	75
November	9.6	1,020.2	22.8	31.7	14.3	27.1	18.5	9	8	97
December	8.1	1,014.0	24.9	33.9	17.8	29.0	20.8	182	16	130
Year	8.1	1,018.9	21.1	36.8	5.7	25.8	16.4	1,042	125	1,151

(a) Days on which 0.1 mm or more of rain fell.

(b) Average annual rainfall based on all years of record.

3 RAINFALL

Rainfall is by far the most important weather factor in Queensland's agricultural production. It is nearly always more important than the combined effect of all other factors—frost, excessive heat, winds, humidity, etc. The most important aspects of rainfall are its annual amount, its seasonal incidence (i.e. summer and winter), its variability from year to year, and its distribution within the growing season of the various crops and pastures. These aspects are discussed below.

Annual Amount of Rainfall

Average annual rainfall in Queensland varies from about 150 mm in the desert of the extreme south-western corner of the State to about 4,000 mm in parts of the sugar lands of the wet north-eastern coast, the latter being the wettest part of Australia.

Mean rainfall over the whole of Queensland is 580 mm a year, compared with the Australian average of 430 mm. However, higher rates of evaporation and run-off reduce the effectiveness of Queensland's rainfall to some extent.

Maps between pages 32 and 33 show the average annual, summer, and winter rainfalls. Each map represents a generalised estimate of average rainfall throughout the State and does not include minor local variations due to topography.

Rainfall data for specific areas may be obtained from the Queensland Regional Office of the Bureau of Meteorology, Brisbane.

The following table shows for a number of typical reporting stations the annual rainfall as well as the average annual rainfall based on all years of record.

Seasonal Incidence of Rainfall

Every part of Queensland receives more rain in the summer six months (November to April) than in the winter six months (May to October). The concentration of rain in the summer months is greatest in the north and west, reaching a maximum in the Gulf of Carpentaria region. This area receives only 25 to 40 mm of rain in winter, or about one-twentieth of the annual total. South of the Tropic of Capricorn (Rockhampton–Longreach) winter rainfall becomes an

ANNUAL RAINFALL, QUEENSLAND
(millimetres)

Locality	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	Average (a)
<i>Coastal</i>											
Brisbane	1,262	2,194	1,090	1,312	660	965	748	1,136	1,453	1,042	1,151
Bundaberg	1,884	1,478	852	1,455	783	1,138	477	843	973	988	1,155
Gladstone	1,418	1,205	988	970	967	962	527	841	973	538	947
Rockhampton	1,637	1,172	914	995	835	1,180	470	604	710	394	871
Mackay	1,767	2,307	1,710	2,248	1,534	1,409	2,482	1,183	1,359	980	1,672
Townsville	1,533	1,707	1,447	1,437	1,320	1,070	1,025	722	1,762	701	1,215
Innisfail	6,906	4,494	6,531	4,799	7,730	4,222	6,445	3,888	7,368	4,230	3,726
Cairns	2,852	2,498	2,428	2,000	2,784	1,425	2,836	1,472	2,792	1,445	2,030
Thursday Island ..	2,174	1,419	2,316	2,073	2,614	1,673	1,598	1,718	2,145	1,316	1,721
Normanton	1,203	851	875	1,249	1,096	443	1,062	770	1,009	500	934
<i>Sub-coastal</i>											
Warwick	709	700	1,091	911	534	793	576	492	589	569	744
Toowoomba	1,021	1,255	1,200	1,165	868	1,235	920	955	1,479	896	963
Kingaroy	885	815	885	749	338	1,090	765	699	939	753	778
Gayndah	874	736	623	857	534	898	831	573	806	605	785
Emerald	852	977	1,075	679	674	889	445	564	754	344	639
Charters Towers ..	916	1,632	872	573	651	707	712	606	1,228	366	658
Atherton	1,736	2,391	1,378	1,322	1,569	956	2,171	828	1,760	1,000	1,539
Coen	1,842	1,038	1,377	1,369	1,380	694	1,346	935	1,851	1,232	1,177
<i>Western</i>											
Cunnamulla	534	510	494	638	322	507	189	308	345	151	369
Charleville	824	488	506	546	484	550	273	419	427	245	513
Blackall	693	641	431	509	555	559	292	459	679	259	530
Longreach	606	653	457	467	547	461	295	598	454	173	485
Boulia	660	774	311	406	507	391	257	214	260	81	269
Winton	676	1,086	453	694	496	467	386	227	543	200	414
Hughenden	822	638	775	500	387	442	317	493	935	296	490
Mount Isa	539	1,175	665	376	819	495	308	323	520	367	476
Georgetown	1,248	2,046	1,000	930	657	662	1,130	915	1,330	443	830

(a) Average of all years held in computer compatible record to 1978.

important part of the annual total, being about 30 per cent, while it rises to about 40 per cent along the southern border of the State. The east coast of Queensland, both tropical and sub-tropical portions, receives a substantial portion of its rain in winter, but on the tropical coast this is mainly due to the prolongation of the autumn rains into April and May, while July, August, and September are relatively dry months.

This seasonal distribution is reflected in the temporal pattern of flooding. Winter floods may occasionally affect sub-tropical districts but most of the State's flooding is experienced from January to April, when catchments are regularly saturated and rates of run-off are high.

Variability of Rainfall

One of the most outstanding features about Queensland's rainfall is its great variability, not only from year to year but also from place to place during the same year. This is due to the sporadic nature of cyclones and tropical depressions as well as the variability of thunderstorm rains which frequently make up a large proportion of the spring and early summer totals. There is a great difference in reliability of summer and winter rain between north and south Queensland. North Queensland has highly reliable summer rains, particularly in the east coast and Peninsula areas. Winter rains are very unreliable in north Queensland, except for the regular late autumn falls of the Cooktown-Ingham, Proserpine-Mackay, and Cape York areas.

In south Queensland good summer rainfall is slightly less reliable than in north Queensland, except for the south coastal fringe, which has an assured summer rainfall. However, good winter

rainfall is far more reliable in south Queensland, particularly near the coast, and it is sufficiently frequent further inland to be of economic value for winter crops such as wheat and oats.

4 DROUGHTS

(Contributed by the Queensland Regional Office of the Bureau of Meteorology)

The following is derived mainly from two Bureau of Meteorology publications: *Droughts in Australia*, by J. C. Foley (Bulletin No. 43, 1957); and *Rainfall Deciles as Drought Indicators*, by W. J. Gibbs and J. V. Maher (Bulletin No. 48, 1967). Droughts are treated in detail in these publications, which also give comprehensive rainfall data and detailed descriptions of data treatment and analysis methods.

General

Drought is in many ways a relative term. Crops, vegetation, industries, and land use in different parts of the world are more or less adjusted to the moisture or water normally available to them. A rainless period that would constitute a drought in one region may not be unusual or injurious in another. Drought is also a relative term in a given area, since conditions which a market gardener would regard as drought may cause a pastoralist no concern.

The vulnerability of a nation's economy to drought changes with time. Increased development, particularly in the spheres of transport, water conservation, and diversification of the economy, may mitigate the serious adverse effects of extended dry periods which in earlier years would have been regarded as disastrous.

Development does not always act to decrease the effects of drought. Population increases and the establishment of secondary industries create an increased water need and give rise to problems of combating drought in new areas and sectors of the economy.

Water need is thus a function of time and place and depends on many factors. The nature and intensity of land water use, transport facilities, water storage capacity, number of stock involved, and the development of drought resistance in plants are among the factors which affect water need and the impact of drought on primary and secondary industry and the community in general. The only objective method of defining drought is to specify minimum water needs for a particular purpose and this can then be compared with water available.

Rainfall as a Drought Index

The natural availability of water depends on rainfall, although other effects such as evaporation, wasteful use of water, moisture storage in the soil, and storage of water in artesian basins or reservoirs must be taken into account. Nevertheless, rainfall is the best single index of water availability and monthly rainfall totals are sufficient for most studies of the occurrence, spread, and breaking of droughts.

Thus, if the minimum water need for a given period of time is met by rainfall of a given amount 'X', drought may be said to occur whenever the rainfall during that time interval is less than 'X', and the severity of drought linked to the amount by which rainfall falls short of the requirement.

Rainfall has several advantages over other criteria, such as the effects on plants and animals, as a basis for study. Rainfall data are numerical, and methods for their observation, collection, and processing have been substantially unchanged over the past 100 years. The data are therefore amenable to statistical analysis by electronic computers. They also provide uniformity, reliability, and completeness of statistics to a degree that is impossible to obtain if other criteria are used as a basis for study.

Rainfall records are available for more than 3,300 stations in Queensland, of which about 2,000 are currently in operation. The length of record varies greatly; at some stations, records have been taken for more than 100 years and about one-fifth of the stations have records exceeding 70 years.

Drought Study

Scientific study of the areal extent of drought and its frequency of occurrence is essential for the proper planning of agricultural, pastoral, industrial, and economic activities. Such studies can provide an assessment of drought risk and assist the planning of short-term action, such as the declaration of drought occurrence and the choice of areas to which stock might be moved.

An additional, useful field of research is the determination of the water needs of crops, animals, industry, and communities. This information is basic to any drought study and is essential if drought is to be defined in a meaningful way.

Surveys of the impact of drought on the Australian economy at various stages of its development are not only of historical interest. They provide information which can enable planners to profit from past experience and to seek remedies for circumstances which aggravated the disastrous effects of previous droughts.

Foley (1957) used reports of conditions of crops and livestock published in official bulletins, journals, and newspapers, together with rainfall analyses, to produce a comprehensive historical review of Australian rainfall and the effects of drought on primary industry. This work has been continued by other workers in the Bureau of Meteorology. The Bureau bases its current drought research program on the statistical analysis of rainfall, but this has not been done to the exclusion of other factors significant in drought analysis and study.

Drought Prediction

For many years there has been great interest in the variations of rainfall in time. Investigators have sought for any regularly recurring cycles of rainfall patterns, and for any tendency for dry and wet periods to persist. As yet no reliable method for the long-range forecasting of rainfall and drought has been devised.

Many writers have reported cycles with various periods, but their conclusions have been unable to withstand the test of critical statistical analysis. Further studies in this direction are planned by the Bureau of Meteorology, concentrating on very low rainfalls and using the latest statistical techniques combined with the calculation and analysis facilities of large, high-speed computers.

Treatment of Data

Rainfall, unlike many other meteorological elements such as temperature and pressure, is non-continuous in time and space. As a result the statistical description of rainfall occurrence is quite complex.

The best known and most commonly used rainfall statistic is the arithmetic mean, often called the 'average' or 'normal'. Monthly means are computed by adding the rainfalls in a given month over a long period and dividing the total by the number of years of record.

Another statistic is the 'median' or '50 per cent' value, which is the value exceeded by half the occurrences and not exceeded by the other half. With many meteorological quantities the mean or median values are equal or very close, and the use of 'average' for either value causes no confusion. Although this is often the case with annual rainfall, for shorter periods (three months or less) the mean can differ significantly from the median.

This is exemplified by January rainfalls in the following table.

MONTHLY RAINFALLS
(mm)

Place	Mean	Median
Brisbane	166	133
Cairns	399	399
Charleville	78	59
Cloncurry	108	71
Longreach	70	44
Rockhampton	159	131
Toowoomba	140	122
Townsville	307	221

To obtain some idea of the 'spread' or variability of monthly rainfall, the amount which is not exceeded in the driest 10 per cent of years (the first decile) and that exceeded in the wettest 10 per cent of years (the ninth decile) are often quoted.

Decile values divide each 10 per cent of occurrences from the driest to the wettest years and give some indication of rainfall variability. The Bureau of Meteorology has adopted decile ranges for drought studies. The first decile range (decile range 1) is the range of the driest 10 per cent of rainfalls, the second decile range is the next driest 10 per cent, and so on. The middle 40 per cent of rainfalls (decile ranges 4-7) can be considered as 'average', although in some cases the arithmetic mean may lie outside this range.

Decile Maps

Maps for each year from 1885 to 1965 showing the decile ranges in which annual rainfall occurred are provided in *Rainfall Deciles as Drought Indicators*, together with maps showing the rainfall amount corresponding to the first, fifth, and ninth deciles. The maps show a measure of rainfall anomaly rather than the actual amount of rainfall and this assists rapid assessment of the rainfall situation over areas where the mean and median amounts of rainfall differ greatly.

Assessment of Drought Areas

Areas on annual decile maps where rainfalls were in the first decile range can be used as an arbitrary and approximate assessment of drought areas, although this index has the following limitations:

- rainfall totals are for calendar years, and droughts occur over periods lasting from one month to a number of years;
- in the northern half of Australia the 'water year' does not coincide with the calendar year; and
- drought occurrence depends on land use as well as rainfall.

The index gives only an approximate indication of drought risk and the manner in which drought areas cover the continent. In some areas drought may occur or continue with rainfall in the second, third, or higher decile ranges.

History of Drought in Australia

Foley (1957) used reports of conditions of crops and livestock, published in official bulletins or in newspapers, together with rainfall analyses, to determine the history of drought in Australia. Foley gives a comprehensive review for each Australian State and a briefer discussion for the Commonwealth as a whole. A summary taken from Foley's review is given by Gibbs and Maher (1967) and supplemented by later reports for the period 1955 to 1966. Readers interested in the detailed history of drought in Queensland, or in Australia, are referred to these works.

Drought in Queensland

The rainfall records at Brisbane date from 1840 but have been continuous only since 1858. Rainfall records in the State generally start in the 1870-1880 decade. Descriptions of drought

date back to the proclamation of the colony as separate from New South Wales in 1859, but little previous information is available. The State has suffered severely from drought throughout its history.

The principal droughts since 1858 are listed below:

- 1858 Few details.
- 1862–1868 In January 1868 the 'breakup of the extended drought which had prevailed throughout the country' was reported, but in some areas the drought extended on into December.
- 1882–1886 The first major drought apparent in Queensland rainfall records. It commenced in the south-east about two years earlier than elsewhere and ended about March 1886.
- 1887–1888 This drought was comparatively short but very widespread. It was confined mostly to 1888 which was a poor rainfall year, 1887 being quite good for the year as a whole.
- 1898–1903 One of the most severe droughts ever experienced in Queensland. A series of very dry or drought years with only a few areas getting good rains was followed in 1901 and 1902 by very dry conditions throughout the State which had a devastating effect on any stock, crops, and pastures which had survived earlier years.
- 1914–1915 Severe drought followed the failure of the 1914–15 wet season rains; some useful falls in August in the south-east followed a dry winter. Temperatures were abnormally high and some stations recorded the lowest rainfall on record for a calendar year. Good rains fell in December 1915.
- 1918–1919 From mid-March in 1918 drought developed over Queensland and by mid-November had become acute over the whole State. It ended in January 1920.
- 1922–1923 Drought over the western half of the State in 1922 and at times the eastern half. In 1923 the drought was general and severe.
- 1925–1926 One of the worst drought years in history began with the failure of the 1925–26 summer rains and in some parts was more severe than in 1902. Most of the State was affected, stock and crop losses being heavy. Some temporary relief rains fell in September, but drought conditions were soon re-established and continued until substantial rains fell late in December.
- 1927–1929 Severe drought in the south-western quarter of the State.
- 1934–1936 By the end of 1933 all inland districts were very dry, whilst 1934 was not a favourable year, terminating with three very dry months. Thus 1935 opened with drought conditions over much of the interior, and devastating losses continued throughout the year. This drought continued in the south-east during 1936, resulting in failure of the wheat crop for that year.
- 1937–1944 There were a number of patchy but limited droughts in this period.
- 1945–1947 The year 1945 was on the whole very dry and in many parts severe losses had occurred, especially in the south. January rains were good, but most areas missed the February falls and, after a few good coastal falls in March, the year 1946 developed into a drought year. The exceptionally dry winter was accentuated by widespread frosts. There were severe stock losses and crop failures; dairy production was the lowest since 1926.

- 1951–1952 Following the record heavy rains in 1950, a dry spell commenced in February 1951 and continued until March or April 1952. By the end of November, after nine months of record or near record low rainfall, the State was experiencing severe drought. Stock losses were very heavy and crop and dairying yields were very low.
- 1953–1954 In January 1954, the drought extended from the Gulf, through the north-west and south-west, to the Darling Downs.
- 1957–1959 Very dry in 1957 and 1958, culminating in a severe drought in the south-western corner of the State in 1959.
- 1964–1966 Severe drought mainly in the south-west and south, particularly from November 1964 to November 1965. In 1965, an area around the Central Coast, Central Highlands, and the South Coast (Curtis) districts was also affected. Good rains in December 1965 and January 1966 brought relief but dry conditions persisted in the far south-west and parts of coastal areas as late as August 1966.
- In the north east, drought conditions commenced about October 1964 and continued throughout 1965 and following an improvement in January to March 1966 again deteriorated. Other areas were also affected during this period.
- 1967 Drought in lower western and in central west.
- 1969–1970 Widespread drought, most severe in western border districts and in Central Coast districts, with average rains, however, in Darling Downs, Maranoa, Warrego, and northern Cape York Peninsula, and drought easing in areas adjacent to those districts in 1970.
- 1972 Drought in southern half of State, most severe in south-western quarter.
- 1977–1980 After comparatively poor summer rains combined with failure of the winter rainfall, drought conditions became established over the south-east quarter by late 1977 and continued into 1978. Substantial winter rainfall finally eased the situation in 1978. The 1977–78 summer rainfall for the far northern tropical inland and Cape York Peninsula was also a virtual failure and drought became established by early 1978, continuing to the 1978–79 summer.
- Less than average rainfall over the southern interior brought drought by late 1979 to early 1980, to that area.
- 1981–1983 In the south-west quarter the drought which began in late 1979, continued into 1981.
- Winter and spring rainfall in 1981 was in general above average, except for spring rain in the western districts. The 1982 summer and autumn rainfall was below to well below average throughout the State and the number of drought declared areas increased during the second half of 1982.
- A lack of summer rainfall during 1982 and 1983 increased the drought area to include large regions of the north-west. The south-east corner was the only area of the State not affected by drought.
- Rainfall during March 1983 in the western regions gave a measure of relief but the drought continued in the central and southern districts. Widespread rainfall during April and May finally ended the drought in Queensland which was one of the worst on record in eastern Australia for the past 100 years.

5 TROPICAL CYCLONES

(Contributed by the Queensland Regional Office of the Bureau of Meteorology)

Tropical cyclones are one of the most devastating of natural phenomena. They are intense low pressure systems which develop in tropical areas of the world. They are known under various names such as tropical cyclones (Australia), hurricanes, typhoons, or by other local names; e.g. 'Baguio' is used in the Philippines.

A tropical cyclone is a roughly circular system of gale force (speeds more than 63 km/h) winds whirling clockwise in the Southern Hemisphere around a centre of very low atmospheric pressure, called the 'eye'. The eye is an area of calm or light winds with only small amounts of overhead cloud. Eye diameters vary between 1 and 30 km. The diameter of the entire cyclone is usually about 300 km, although cyclone 'Ada', January 1970, was only about 100 km in diameter and cyclone 'Henrietta', April 1964, was 1,300 km in diameter.

At low latitudes, the system may be almost stationary or travel at a speed of up to 25 km/h. When recurving, the movement becomes quite slow, but in mid-latitudes may be as much as 80 km/h. The pressure gradient around the eye is very steep because of the extremely low central pressures; this causes unusually strong winds. The table below gives probable maximum wind gusts for various central pressures.

Central pressure	Probable maximum wind gusts near centre	
	kn	km/h
914	155	286
931	140	258
948	125	230
965	105	194
982	85	157
999	55	101

In the low levels of the atmosphere the wind blows in a clockwise direction (Southern Hemisphere) around a low pressure system, spiralling inwards to the centre. During the months November to April, over the warm tropical oceans, where unlimited moisture is available, this motion around the low pressure gives rise to very rapid vertical motion of the air around the centre and the development of a deep cloud structure (cumulo-nimbus with tops to 12,000 metres) with heavy rain. The release of large amounts of latent heat due to condensation together with the heat from the ocean surface provides the energy for further development of the storm.

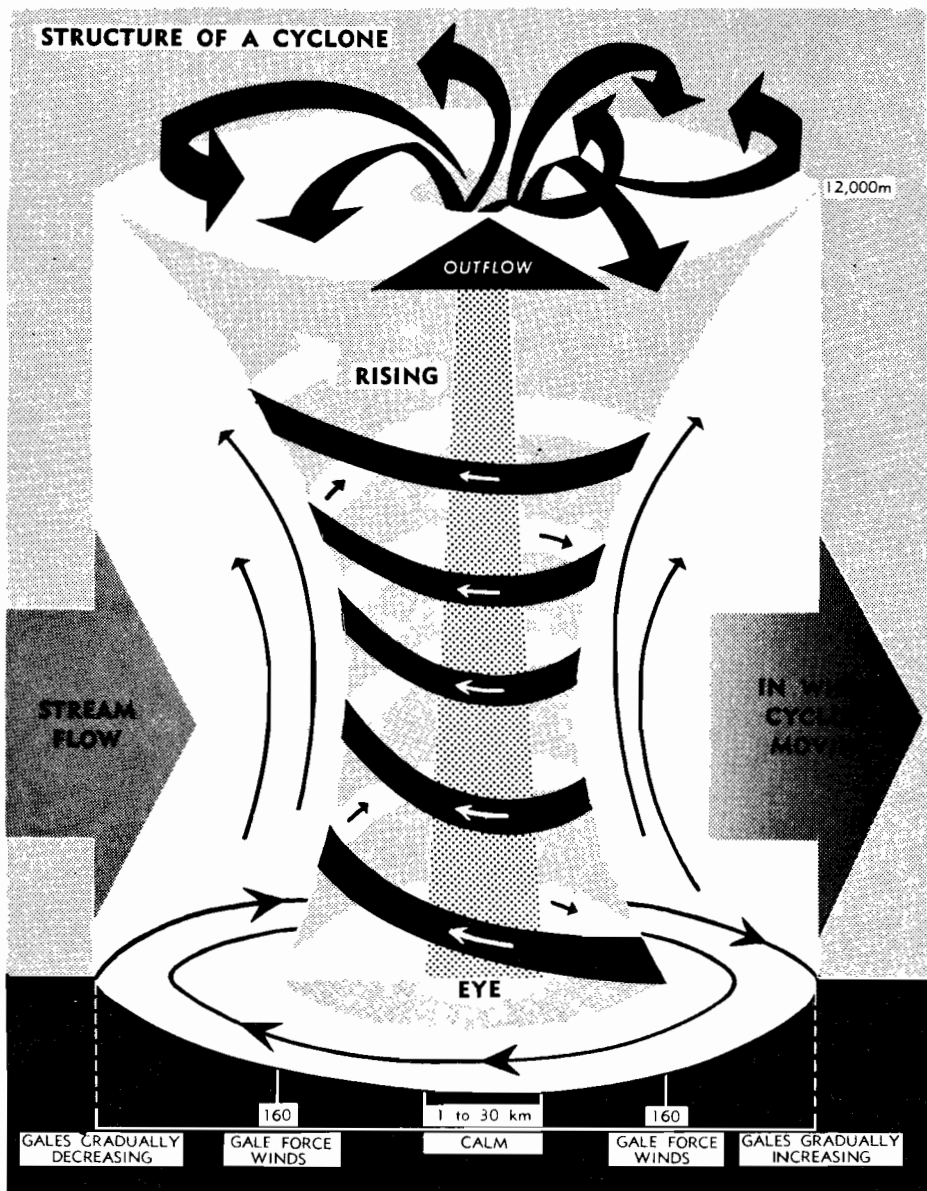
Area of Formation

Tropical cyclones form over tropical oceans, mainly within about 15 degrees of the Equator. Those affecting Queensland usually develop in the Coral Sea, the Solomon Sea, the Gulf of Carpentaria, or the Arafura Sea. A few come from the Western Australian Region, crossing the northern parts of Australia and regenerating upon reaching the eastern oceans. A few have their origin in the South Pacific east of the Solomon Islands.

Frequency

Based on known occurrences over more than a century, a major tropical cyclone, with sustained winds of more than 110 km/h with gusts generally half as much again, will strike a particular locality in the area from Cairns to Mackay once in 20 years, north of Cairns once in 40 years, from Mackay to Rockhampton also once in 40 years, and south of Rockhampton once in 50 years. However, tropical cyclones of lesser intensity, or which do not cross the coast, occur much more frequently and can cause considerable damage to coastal areas.

On the average, three tropical cyclones per season (November to April) affect some part of the coast. Although the breeding area remains approximately the same, there is a tendency for



tropical cyclones to travel further south in the latter part of the season due to increasing sea temperatures.

Most tropical cyclones occur in January to March with the chance in December and April considerably less. Only on rare occasions do they occur outside the November to April period.

The number of tropical cyclones affecting eastern Australian waters from 1910 to 1975 was found to be distributed as follows:

	Dec	Jan.	Feb	Mar.	Apr	May-Nov.
Number	29	75	70	70	35	23
Average number	0.4	1.1	1.0	1.0	0.5	0.3

The total frequency for the season is less than the overall total for the months because, where a tropical cyclone persisted from one month to the next, it is counted in both months.

Movement

Tropical cyclones do not always move in parabolic paths. Records over the years show that the tracks are generally random, some being quite straight for considerable distances and others looping and crossing their earlier path. There is, however, a general tendency for southward moving cyclones to recurve away from the coast when they pass south of about the Tropic of Capricorn where they frequently encounter the high level westerlies. The weakening is due to gradually reducing sea temperatures as the cyclone moves into the south Queensland area which reduces the available energy.

Although tropical cyclones vary greatly in character, the sequence of events as a severe tropical cyclone moves through a particular locality may be as follows:

The first 24 hours bring winds freshening to gale force with unusual gustiness and an overcast sky with rain squalls, increasing in frequency. Within the next twelve hours, the winds may be 110 km/h to 190 km/h or more, with continuous heavy rain.

If the central eye passes overhead there will be a lull lasting from a few minutes to possibly over an hour depending on the width of the eye and the forward speed of the system.

Calm or light variable winds will be experienced, with scattered clouds and possibly sunny periods and with threatening clouds around the horizon.

After the eye passes, again there will be several hours of 110 km/h to 190 km/h winds, but from the opposite direction, with continuous heavy rain. Finally during the next few hours the gales and rain squalls will moderate. Rising seas occur in the first 24 hours, followed by extremely rough seas in the next few hours, confused pyramidal seas (caused when wavetrains driven inwards from different directions converge) occur towards the cyclone eye, a further several hours of extreme conditions, and finally moderating seas. See also *Storm Surge*.

Life of a Tropical Cyclone

The total life of these storms is mostly unpredictable. Some will develop rapidly and die just as quickly, others mature slowly and can be identified for many days, while yet others over a long period may weaken and re-intensify.

Rainfall

In tropical cyclones rainfall is usually widespread and heavy. The heaviest falls are concentrated around the eye and in the region of strongest onshore winds. If the system moves slowly over a locality, that area may be deluged. On the other hand, if the storm is moving rapidly, falls will generally be less.

Many falls of over 450 mm in 24 hours have occurred due to cyclones. Highest totals recorded are:

- 1,140 mm in 24 hours at Bellenden Ker Top Station, 4 January 1979 ('Peter')
- 907 mm in 24 hours at Crohamhurst, 3 February 1893
- 869 mm in 24 hours at Mount Dangar, 20 January 1970 ('Ada')
- 1,044 mm in 36 hours at Springbrook, 19–20 February 1954
- 305 mm in 2 hours at Upper Ross, near Townsville, 3 March 1946
- 1,864 mm in 5 days ending 12 January 1972 at Paluma ('Bronwyn'). (Including successive 24 hour totals of 629 mm and 635 mm.)

Pressure

Pressures as low as 914 mb ('Bathurst Bay Cyclone', 5 March 1899) have been reported in Queensland tropical cyclones. However, such pressures are rarely recorded on land. Central pressures usually range from 950–990 mb.

As the storm approaches, pressure decreases, this reduction being more pronounced as the eye passes over the station. This is followed by an equally rapid rise as the system moves away. The pressure drop may not be steady throughout. Rhythmic oscillations (pumping) are often recorded and are caused by the extreme gustiness of the wind.

In very small cyclones, such as 'Ada' at Proserpine in January 1970, there is little forewarning locally of their approach. Steady pressures, light winds, and little rain can prevail until the cyclone is only about 50 km away.

Wind

Usually the most intense wind conditions in a tropical cyclone are to be found in the left-hand semicircle (facing in the direction of travel of the system).

Highest wind gusts (3 seconds duration) recorded on the Queensland region are 200 km/h at Willis Island, 195 km/h at Townsville, and 186 km/h at Bowen.

Storm Surge

As well as rough seas, a cyclone near a coastline may generate a 'storm surge'; a rise in normal tide levels which may be as much as 3 to 6 metres above the maximum high water level. The storm surge should not be confused with the ordinary and more visible wind driven waves and swells. The waves and swells, with a frequency normally 5 to 12 per minute may reach amplitudes greater than that of the storm surge, and may do extensive damage near the shore line. The storm surge has a wavelength of many kilometres and, in low lying and swampy land, it may penetrate several kilometres beyond the normal shore line.

The surge is mostly produced by winds driving the seawater shorewards and partly by the low atmospheric pressure at the storm centre. In shallow water the surge is amplified due to shoaling.

In cyclone 'Althea' at Townsville in December 1971, the storm surge added an extra 3 m to the height of the tide at the time it arrived, making a total of 4 m. If the surge had occurred at high water about 5 hours later, the storm tide could have been 5 m and would have multiplied the damage considerably.

Detection and Tracking

Before such sophisticated equipment as will be discussed later was introduced, tropical cyclones were detected and tracked solely through the use of weather charts based on wind and pressure observations from a network of surface stations. This type of chart is still the basic tool of the analyst, but atmospheric conditions at levels above the earth's surface also need to be analysed.

Measurements at upper levels of wind, pressure, temperature, and humidity are obtained by radar tracking of hydrogen-filled balloons with a radio transmitter and sensing equipment attached.

Many tropical cyclones, particularly those which form well out in ocean areas, are first identified from satellite photographs. The Japanese geostationary meteorological satellite (GMS) maintains a fixed position with respect to the earth, at a height of 36,000 kilometres over the equator, at 140 degrees longitude. The GMS normally provides pictures at three-hourly

intervals, but is capable of increasing the rate to half-hourly. The Coral Sea and the Gulf of Carpentaria are covered quite comfortably by the pictures. Meanwhile, orbiting satellites cross particular regions at regular intervals and transmit pictures to several receiving stations in Australia, including one in Brisbane.

When the cyclone is within range, i.e. within 240 km, of a radar station (Cairns, Townsville, Mackay, Gladstone, Mount Kanighan, Brisbane, and Byron Bay are the coastal radar stations in the north-eastern Australian region), it may be tracked with radar equipment.

The pattern of rain echoes on the radar screen follows the cloud formation closely, so that the appearance is somewhat like that of the satellite photographs. The location of the eye (a rain-free area) and the boundary of heavy rain can usually be included in the radar-derived cyclone warnings.

At remote localities such as the outer Barrier Reef, where a manned reporting station is not feasible, the Bureau of Meteorology has installed automatic weather stations. These stations report by radio every three hours giving barometer reading, wind direction and speed, temperature, and rainfall. Automatic stations are operating at Cato Island, Frederick, Creal, Marion, Flinders, Lihou, and Holmes Reefs, and Gannet Cay. Willis Island has a manned meteorological station. Data from these stations are very useful in compiling the surface synoptic charts.

Weather reports from ships and aircraft also give valuable information, especially if they are in the vicinity of the deepening low pressure system or mature tropical cyclone.

Tropical Cyclone Warnings

Information to the public relating to the presence of tropical cyclones is handled in three distinct phases. These in brief are the following:

- (i) **Information Phase.** When tropical cyclones are in or approaching the Queensland area of responsibility, but gales are not expected on the coast within 48 hours. In this phase, advice is passed to the public through the normal issue of notes on the chart (part of the Official Weather Report) and released as a news item to the media.
- (ii) **Cyclone Watch Phase.** Issued when a tropical cyclone or the potential for the development of a tropical cyclone exists but is unlikely to affect the coast within 24 hours. This message is designed to alert communities that a potential threat exists and to give time for the necessary precautions in case an actual warning follows (see *Precautions* below).
- (iii) **Cyclone Warning.** Issued when an existing tropical cyclone, or developing disturbance with cyclone potential, is expected to cause at least gale force winds within 24 hours on or near some section of the coast. Cyclone warnings are issued every three hours to the threatened areas. If the centre is close to the coast and posing a severe threat, warnings are issued hourly or more frequently if practicable. This is usually only possible when a cyclone is under radar surveillance.

Pamphlets prepared and distributed by the Bureau of Meteorology further explain the nature of a Tropical Cyclone and the warnings issued.

Precautions

Because a cyclone may isolate a town or house and cut services, the collection of emergency supplies, plans for the sheltering and feeding of livestock and pets, checking the soundness and strength of houses, etc. are advised. An evacuation plan including an escape route, a refuge, and priorities for taking valuables may be necessary for homes likely to be menaced by cyclone-generated storm surges from the sea or river flooding.

Pamphlets giving details on advisable precautions are available from the State Emergency Services, the National Disasters Organisation, and the Bureau of Meteorology.

Notable Cyclones

In the following list of notable cyclones it will readily be seen that the greatest loss of life resulting from these disturbances is due to either high seas offshore, storm surge incursion on shore, or flooded streams. As an illustration of these points over 300 lives were lost when the Queensland pearling fleet sheltering in Bathurst Bay in 1899 was destroyed. In the Clermont flood of 1916, caused by the movement inland of a cyclone, 62 people were drowned.

Listed below are brief details of major cyclones that have affected the Queensland region since 1970. For details of major cyclones between 1893 and 1970 see the 1977 and earlier issues of the *Year Book*.

Whitsunday Island, Proserpine: 17–19 January 1970; cyclone 'Ada'; central pressure estimated as 962 mb; \$12m damage; 13 lives lost; gusts to 130 km/h. Due to the small diameter of the cyclone, in the area later affected the barometers remained relatively high and steady and there was no wind or rain of significance until the cyclone was quite close. Cyclone 'Ada' caused heavy rains and floods. 'Ada' filled and weakened when 30 km north-west of Mackay, late 19 January.

Townsville: 24 December 1971; cyclone 'Althea'; central pressure 952 mb; \$25m damage; three lives lost; noted by United States meteorological satellite ESSA 8, 21 December; definitely identified as a cyclone 22 December; 10 a.m. 24 December, eye crossed coast 48 km north of Townsville; 3 metre storm surge which fortunately occurred just after low tide; gusts reached nearly 200 km/h; major flooding all central and southern interior river systems in Queensland ensued; weakened 25 December; crossed coast again midnight 27 December near Maryborough; winds reached gale force again between Pinalba and Noosa Heads.

South-east Queensland: 24–27 January 1974; cyclone 'Wanda'; wind gusts up to 130 km/h on the coast; associated with a monsoonal trough which extended much further south than usual caused record flooding with rainfall registrations up to 2,000 mm during the month. In Brisbane some 6,700 householders had their living area partially or completely inundated; in Ipswich, 40 houses washed away and 1,800 premises severely damaged; estimated damage in and around Brisbane alone was \$200m; 15 lives were lost in south-east Queensland.

Southern Gulf of Carpentaria: 19 December 1976; cyclone 'Ted'; central pressure 950 mb; crossed the coast north of Burketown causing extensive damage to Mornington Island and Burketown itself. Damage was estimated at \$8m.

Coral Sea—Central and North Coast: Cyclone 'Kerry' 13 February to 6 March 1979; lowest central pressure 955 mb. After causing loss of life and widespread damage as it passed over the Solomon Islands, 'Kerry' moved slowly and erratically towards the Central Coast. It made landfall near Mackay early afternoon on 1 March causing damage to moored craft and harbour installations. The cyclone was the first in Australia to be penetrated by a fully instrumented research aircraft of the United States National Oceanic and Atmospheric Administration. Maximum observed winds during penetration was 252 km/h at 540 m altitude in the south-west quadrant on 22 February. 'Kerry' also has the distinction of being the longest lived cyclone on record for the Australian region.

Coral Sea—Central Coast: Cyclone 'Elinor' 11 February 1983 to 4 March 1983; lowest central pressure 935 mb. 'Elinor' also meandered through the Coral Sea and finally

crossed the coast near Carmila during the early morning of 4 March. Minor damage to property and powerlines in the Yeppoon, Mount Morgan, and Rockhampton areas.

Cyclone Names

The first record of naming significant weather systems was when a tropical cyclone was given the name 'Zeta' in 1894 by Clement Wragge. Wragge's system continued for some years, then fell into disuse.

In the mid-1950s the news media often selected names for cyclones. This practice was regularised in the 1964-65 season when female names were selected by international agreement. From the 1975-76 season the prepared list was extended to include male names.

Male and female names are now used alternately. Cyclones are named by the regions in which they form.

6 FLOODING AND FLOODWARNINGS

Serious flooding usually occurs in Queensland in the period November to April which coincides with the cyclone season. In south-east Queensland, however, major floods have occurred in most months. August and September are usually flood free, but the Macintyre River, inland on the Queensland-New South Wales border has had significant flooding in all months.

In summer months, flooding exhibits several characteristics, dependent upon the river basin. In the large river basins, west of the Great Dividing Range, major flooding can last for more than a month as the flood wave moves downstream. Frequently in western rivers there are several flood peaks in a river basin at the same time, with the flood peaks perhaps two weeks, flood travel time, apart. The effect of these floods, combined with the very large network of unsealed roads in western Queensland, is to bring land transport to a standstill, causing isolation of towns and homesteads for long periods, up to two months. This is in contrast to floods in Queensland coastal rivers where floodwaters often rise and fall within 24 hours. Along the Queensland coast it is rare for a year to pass without at least one serious flood threat to a major centre.

Floodwarning Service

The Queensland Floodwarning Organisation is maintained by the Bureau of Meteorology which is responsible for issuing warnings of flooding for all rivers in Queensland and for the issuing of flood forecasts for selected river basins in the more densely populated areas of the State.

Flood forecasts and warnings constitute a direct means for the reduction of flood damage and loss of life. Advance warning of an approaching flood permits the evacuation of people and removal of livestock and equipment with little loss except the cost of removal. Warnings of course do not in general prevent damage to crops or structures. Regular broadcasts of flood warnings and interpreted information keep the public well informed and assist in minimising personal anxiety.

Within a floodwarning system, there are three distinct functions, which are carried out generally by three different organisations:

- (i) Formulation and issue of flood forecasts and warnings—usually by the Bureau of Meteorology, but some local and municipal authorities operate systems for their own purposes in consultation with the Bureau.
- (ii) Interpretation of flood forecasts and warnings into areas and levels of inundation (streets, houses, etc.)—usually by the local or municipal authority which has the detailed mapping and local knowledge.

- (iii) Individual and mass alerts that specific areas are to be inundated so that people and property can be evacuated—usually carried out by the State Counter Disaster Organisation through Police and State Emergency Service.

Floodwarning stations report according to a predetermined schedule when threshold values of either rainfall or river height are reached. The frequency of reporting is determined by the severity of the flooding. Reports are sent to 'FLOODWARN' Brisbane, radio stations servicing the individual catchments, and other selected addressees such as police stations and some local authorities.

On receipt of rainfall and river height reports at the Bureau in Brisbane, flood warnings and/or specific forecasts of flood heights are issued up to several times daily, as the situation demands, through Police, State Emergency Service, radio and television stations, both in Brisbane and the flood-affected areas, and to various local authorities and other organisations vitally interested in flooding. Warnings and forecasts of flooding are issued until such time as the danger of flooding ceases.

Flood Warnings

The Bureau of Meteorology issues two types of flood warnings: General Flood Warnings (Qualitative) and Specific Flood Forecasts (Quantitative).

Qualitative Warnings—General qualitative systems are applicable to river basins in which rural and urban communities are affected by overbank flows which cause economic loss. Such warnings usually include a summary of the rain which has fallen over the catchment, key river height information, the location of the flood crest, and the expected severity of flooding in terms of minor, moderate, or major flooding.

Minor flooding causes inconvenience such as the closing of minor roads and submergence of low level bridges and makes the removal of river pumps necessary. The effects of minor flooding may be felt in the reach of the river in question, in the vicinity of the river gauge, or at some distance upstream or downstream.

Moderate flooding causes inundation of low lying areas requiring the removal of livestock and the evacuation of isolated houses. Main traffic bridges may be closed.

Major flooding causes inundation of large areas, isolating towns and cities. Major disruption occurs to road and rail traffic and often other communications. Evacuation of many houses and business premises may be required.

Generally, the river heights for the varying degrees of flooding are determined following consultation with observers or council authorities and may vary from time to time. For example, after a major flood has passed, local experience may show a need to raise or lower the classified levels.

Quantitative Warnings—Increased economic savings can be achieved with the introduction of precise flood forecasting systems where the forecast height on a key river gauge is disseminated to the public up to 48 hours in advance. The advance warning time available is dependent upon the size of the catchment, location of the river reporting stations, the techniques used for flood forecasting, and the desired accuracy. Forecasts can be prepared for the peak height and time of peak and for the time of occurrence of some critical height reached, such as the time of overbank flow, bridge inundation, or the commencement of flooding of urban streets.

Reporting Networks

Before a flood forecasting system can be effectively operated, an integrated reporting system needs to be established for the transmission of river height and rainfall data. Reporting systems include manual river height or rainfall observations sent by telegram, manually interrogated land line telemetry systems, and the more sophisticated automatically interrogated computer-

based radio telemetry system. The Brisbane Valley Radio Telemetry System telemeters reports from 11 key river height stations and 9 key rainfall stations to the Bureau and the Brisbane City Council. Generally, the manual observation stations are manned by volunteer observers who may be farmers, police officers, postal staff, housewives, or local authority employees.

Currently, there are approximately 230 flood warning river height stations and 130 flood warning rainfall stations operating throughout the majority of river catchments in Queensland. Reporting networks are integrated with those required by meteorologists for daily weather forecasts and cyclone warnings, thus radar, satellites, and other installations provide additional information for flood forecasting operations.

Data collected by the Water Resources Commission, the Bureau of Meteorology, and other organisations is collated and is used for the continued development and improvement of flood forecasting systems throughout Queensland.

7 SUNSHINE

Both Queenslanders and Western Australians share the distinction of having sunny areas of their State with the highest annual daily average sunshine for Australia. This amount is in excess of 10 hours per day, and in Queensland it occurs in the south-west corner of the State in the area Birdsville-Boulia-Windorah.

Of the remainder of the State, at least 99 per cent exceeds a daily average of 8 hours, with only a minimal area of the tropical coast from Innisfail to the Atherton Tableland and the top of Cape York Peninsula recording an annual average of less than 7 hours.

The highest daily averages do not occur in summer when the day length is the greatest but in October when the lack of cloudiness combines with increasing day length to bring over 11 hours daily average in the Birdsville-Boulia-Windorah area. During October, 5 per cent of the State exceeds 10 hours with the remainder exceeding at least 8 hours.

July is the month with the least average sunshine. During this month the maximum area is based on Camooweal when the daily average is at least 10 hours. The minimum area is the Innisfail-Cairns-Atherton Tableland where slightly less than 7 hours is the daily average.

8 CLIMATE AND AGRICULTURE

(Contributed by the Queensland Department of Primary Industries)

Climatic factors are largely responsible for the diversity of Queensland's agricultural industries. The climatic variation from cool temperate highlands in the south to wet tropical lowlands in the north is reflected in the wide range of agricultural production in the State. The accompanying map identifies broad climatic zones in Queensland while the legend to the map lists the main agricultural industries within the zones. It is important to note that significant climatic differences occur within some of these broad zones, particularly Cfa and BShw, resulting in marked variations in land use. Symbols used to identify climatic zones in the map are used in the following text.

The year-to-year variation in Queensland's climate, particularly rainfall, is quite high. Most of Queensland, excluding the south-east corner and Cape York, experiences more than 10 per cent greater variability in rainfall than is normal by world standards.

In response to this high rainfall variability, Queensland's agricultural industries have developed production systems which are essentially opportunistic. For example, there is considerable year-to-year variation in both areas planted and planting times for dryland grain and oilseed crops, depending on the level of soil moisture and the occurrence of planting rains.

For the same reasons, areas and planting times can differ quite markedly between districts in a single season.

The highly variable rainfall has led to irrigation developments, even in areas of quite good rainfall, to stabilise crop production. In western areas, the improvement of transport facilities, particularly better roads, helps minimise livestock losses from drought and enables producers to take quick advantage of better seasonal conditions when they occur.

Crops

Sugar cane, Queensland's most valuable crop, is grown in the alluvial valleys and on the red loams of the humid coastal areas. The main rain-grown areas are the two strips of wet tropical and sub-tropical coast around Cairns (Am/Af) and Mackay (Cwa) where the annual average rainfall exceeds 1,400 mm and all years are classed as humid. In parts of the Cairns area, average annual rainfall reaches over 4,000 mm and there is no dry season (Af). Provided the canefields have good surface and internal drainage, excessive rainfall during the wet season does not harm the crop. A drier winter-spring period with clear sunny weather is required, however, for high sugar yields and to allow the harvesting season from June onwards to proceed with minimum interruptions from wet weather.

Other areas of rain-grown sugar cane occur on the alluvial valleys and red loams from Bundaberg to south of Brisbane (Cfa). These areas generally receive an annual rainfall of 1,000 to 1,250 mm with up to 1,600 mm in the Nambour area. The drier areas can expect a summer rainfall of less than 380 mm, a severe drought for cane, once in 10 years with less severe droughts more frequently.

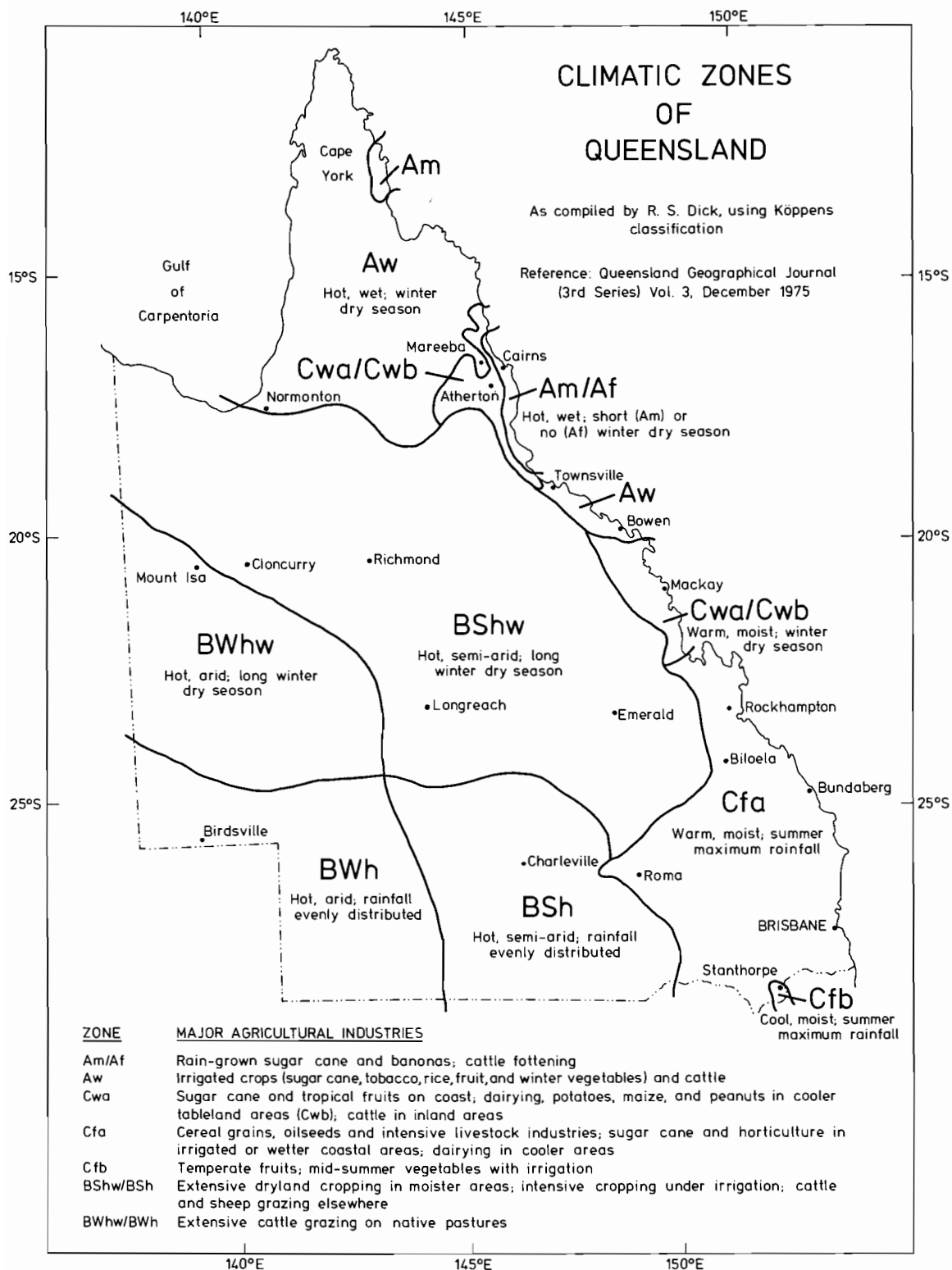
Irrigation of sugar cane is well developed in the Bundaberg district while all cane is irrigated in the seasonally dry (Aw) Ayr-Home Hill district, south of Townsville. The latter area records the highest yields of both cane and sugar content in Queensland due to the controlled application of water to the crop and the high level of sunshine hours.

The major summer-growing crops—grain sorghum, sunflowers, peanuts, soybeans, lucerne, bananas, pineapples, maize, and pumpkins—are all directly dependent on summer rainfall. Although cotton is also a summer-growing crop it is almost entirely irrigated to avoid periods of moisture stress which can decrease yields markedly. Cotton and the summer-growing grains and seeds rely on a period of dry weather in the autumn-early winter for suitable ripening and harvest conditions. Most soybean and lucerne crops are also irrigated at strategic growth stages.

The chief winter-growing crops are wheat and barley. These crops are able to be produced in a predominantly summer rainfall environment through cropping systems designed to store the summer rainfall as available soil moisture in the deep clay soils favoured for these crops. The main wheat-growing area traditionally has been the Darling Downs but since the early 1960s wheat has expanded on to the shallower red-brown earths and grey clays of the plains and brigalow scrubs west to Roma. Although a slightly higher proportion of the annual rainfall comes in winter, yields are more variable in this area because of the higher variability of the summer rainfall component and thus more variable soil moisture reserves. Summer cropping in this environment is risky.

In central Queensland summer rainfall is higher and more reliable. Although much of this, particularly around Emerald, is typed as semi-arid (BShw) due to the lower rainfall effectiveness, it is a relatively reliable summer-cropping area with significant winter crop areas based on summer fallowing techniques to conserve summer rainfall as available soil moisture.

Tobacco is grown entirely under irrigation during the late winter-spring dry season (Aw) in the Mareeba area west of Cairns. Irrigation in the absence of rain enables growth to be controlled and minimises damage from pests, diseases, and erosion which were prevalent when



tobacco was grown on summer rainfall. In southern Queensland the crop is grown in summer, mainly under irrigation.

The winter months provide an excellent growing season in the coastal districts of Queensland for vegetable production based on irrigation. The major areas of production are the Bowen and Bundaberg districts and the Lockyer Valley and Redlands districts near Brisbane. These areas provide nearly all Queensland's winter vegetable requirements and much of that for the southern States as well. Production depends on the relatively high summer rainfall to recharge aquifers and farm dams for winter irrigation. Queensland's summer vegetable production comes mainly from the eastern rim of the Darling Downs and the cool temperate tablelands (Cfb) of the Granite Belt which also produces all of the temperate fruit in the State.

Dairying

The main dairying areas are around Brisbane in south-east Queensland and the very small areas of cool tropical tablelands (Cwb) in the Mackay and Cairns hinterlands. The areas of Cwb are too small to show on the map.

The industry depends largely on sown and naturalised grasses and legumes which make the bulk of their growth in summer. The pastures reach maturity in autumn and become fibrous and unpalatable in the cooler and drier winter months, with consequent low milk production potential in late winter and early spring.

To maintain winter milk production, dairymen in good cropping country grow winter fodder crops such as oats on stored soil moisture from the summer rains. Conservation and subsequent bail feeding of summer grown crops and fodders such as grain, hay, and silage are also important. Where irrigation is available, temperate pastures based on clovers or lucerne can be grazed right through the winter-spring period, while annual rye grasses grown with large applications of nitrogen fertiliser also provide high quality fresh fodder to maintain milk production during the drier and cooler winter season.

Livestock

The natural grasslands of inland Queensland, centred on Charleville, Longreach, and Richmond, support most of the sheep and a large proportion of the State's cattle. With the summer dominant rainfall of this semi-arid environment (BShw, BSh) summer-growing native species such as Mitchell and Flinders grasses predominate on the inland plains. In addition, occasional winter rains in the southern and central inland may provide an important contribution to the bulk and quality of pastures through the growth of non-grass species known locally as 'herbage'. Winter rain in the northern inland, although occurring very seldom, is considered of no advantage as it frequently produces no herbage and merely leaches nutrients from and spoils the dry standing summer grasses on which the stock rely.

Pastoral systems under the highly unpredictable climatic conditions experienced in this environment are relatively stable but sheep and cattle numbers do vary. Considerable skill in management of flocks and herds, paddocks, and water and fodder supplies is required by the pastoralist.

In the inland pastoral districts 380 mm or more of rain results in a good season, provided it comes in several soaking falls. In the southern and central inland over 380 mm is received about one summer in four and one in three in the northern part. On the other hand the southern inland can expect good winter rains (over 150 mm) one year in two, decreasing to one year in nine in the northern inland. Poor summer seasons of less than 250 mm of rain can be expected about one year in four in inland Queensland. A factor contributing to the stability of the grazing industry in the dry environment of inland Queensland is the availability of stock water from the Great Artesian Basin. Also, in the southern inland, mulga scrubs provide an important fodder tree reserve for times of drought.

A feature of the inland north Queensland climatic environment is the marked seasonality of the rainfall. The summer rainfall component increases from 75 per cent at the Tropic of Capricorn to 95 per cent at the Gulf of Carpentaria. This combination of heavy summer rain followed by long winter drought severely limits the chances for dryland cropping in the northern inland areas. The area is devoted to extensive cattle grazing with some sheep grazing on the Mitchell-Flinders grass downs from Cloncurry to Richmond.

The most important feature of the seasonal drought is the annual loss of condition in cattle and the need to hold them over for several wet seasons. Consequently, turnoff rates are low. It has been estimated that turnoff rates in the wet/dry tropics of north Queensland are about 22 per cent compared with 45 per cent for sub-tropical Queensland and 28 per cent in western areas. The other effect of this monsoonal wet/dry climate on pastoral production systems is virtually to rule out any activity during the wet months December to April and for all outside station work to be performed in the cooler dry-season months.

Further towards the western border of the State rainfall is lower and less reliable (BWhw, BWh). This is an area of very extensive pastoral holdings based on cattle production. The main feature of the southern part of this area is the Channel Country which is an extensive system of river channels. When in flood, the water can cover up to 13,400 square kilometres and the subsequent native pasture growth provides some of the best natural fattening country in Queensland. The extent of flooding in the Channel Country varies from year to year but some flooding can be relied upon in normal seasons. The northern arid areas such as the western dune fields and the Mount Isa Highlands carry minimal numbers of cattle on sparse pastures and edible trees and shrubs.

Queensland's native pastures display a summer growth and winter dormancy characteristic which is suited to the summer dominant rainfall. This has resulted in a winter gap in pasture growth which must be narrowed by sowing introduced species to improve livestock productivity.

Below an annual rainfall of 500 mm in southern and 700 mm in northern Queensland, introduced pasture species are generally not able to compete with native grasses but in the higher rainfall zone large areas of introduced pastures have been sown. While these are still summer-growing species they are designed to increase, and extend the period of, productivity over that of the native pastures. The main species have been either a single grass species such as buffel, green panic, or Rhodes grass in the below 1,000 mm zone, or grass-legume mixtures in the wetter coastal areas. The introduced legume, Townsville stylo, has naturalised in parts of the monsoonal wet/dry tropics (Aw) of north Queensland, providing excellent dry season forage at a time when native pasture species in this area are of low nutritional value.

Climatic Hazards

The variability, seasonality, and intensity of rainfall are serious limitations to Queensland's cropping systems. The summer rainfall season usually breaks with high intensity storms which can cause severe erosion of land held in readiness for planting summer crops. The chance of prolonged heavy falls from cyclones or upper-level troughs is also high throughout the summer. Bare summer fallow or crops, such as sunflowers, which do not provide adequate canopy protection are particularly vulnerable. Practices used to minimise soil erosion from heavy rainfall are physical structures, such as contour banks and grassed waterways, and conservation farming systems incorporating strip cropping, stubble mulching, and cover cropping.

Frosts and heat waves are an ever-present hazard in the dryland cropping areas of Queensland. Planting must be carried out to minimise the chance of damage during the critical growth stages of the crop, for example, at emergence, flowering, or head initiation. The chance of frosts and heatwave events is therefore an important consideration in Queensland dryland cropping systems due to the opportunistic nature of planting times which are dependent on the build-up of adequate soil moisture reserves and the occurrence of unreliable planting rains. For

most grain and oilseed crops a range of varieties is available with different maturity times to help minimise damage from frost and heatwaves. Unusually late frosts can cause damage to flowering tree fruit crops and interfere with fruit setting on the Granite Belt (Cfb).

Hail is another hazard affecting crops, mainly in southern Queensland, during spring months. Damage can be particularly severe in the Granite Belt as the temperate fruit crop is at the fruit filling stage during the early summer months. Other areas which can be affected by hail are the cereal crops of the eastern Darling Downs and Lockyer Valley, and the tobacco and small crop areas of the south coast.

While cyclones can cause damage to crops almost anywhere along the coast this damage is usually restricted to downgrading limited areas of the sugar crop from water damage and causing subsequent harvesting difficulties from water and wind damage. Occasionally banana and papaw plantations also suffer damage from cyclonic winds. The overall effect of cyclones, however, is to provide widespread prolonged falls of rain which are generally beneficial to the agricultural industry in Queensland.

Severe droughts, with low rainfall for more than a year, are regularly experienced in inland Queensland. For details, see Section 4, Droughts.

9 SEASONAL ACTIVITIES IN AGRICULTURAL INDUSTRIES

Owing to the large size of Queensland, with its great climatic differences, the times for the various activities in the seasonal calendar of agricultural industries vary according to local conditions. Sheep are shorn all the year round in the State, with the greatest activity during the spring and autumn. Cattle slaughterings reach a maximum in the winter months, whereas dairy production is highest in the summer. Times of planting and harvesting, and the length of the active growing season, of the principal crops are summarised in the table on page 55.

10 SEASONAL CONDITIONS IN QUEENSLAND, 1982-83

Rainfall was below to well below average in most regions of the State for eight of the 12 months covered by this review.

Winter rainfall totals in 1982 were below to well below average and this trend continued throughout most of the 1982-83 summer period. Above average rain did occur in far north Queensland and the near north coast in August and in south-east Queensland in September, October, and December, as well as in the north-west in September and November and in parts of the Darling Downs and near south-west in October and December.

During January and February rainfall continued to be below to well below average in most parts of the State, though in January the Clermont, Emerald, Biloela, Kingaroy, and Goondiwindi districts received above average falls and during March useful falls of rain from scattered storms were received in most cropping districts. Drought conditions then continued during the first three weeks of April, but during the last week of that month and through into May the State was under a near continuous cloud cover and widespread useful rain during this period virtually broke the State's drought situation.

Further widespread rain during May caused soil erosion and severe flooding in many areas of the State.

The hot, dry conditions which prevailed during the past summer and the lack of timely and/or adequate planting rain prevented the realisation of summer crop planting intentions in most districts.

The widespread, persistent rain late in April and during May, with its accompanying soil erosion and flooding, was disastrous for large areas of summer crops, but should permit the realisation of 1983 winter crop planting intentions in all districts.

MAIN TIMES OF PLANTING AND HARVESTING PRINCIPAL CROPS, QUEENSLAND

Crop	Main time of planting	Length of growing season	Main time of harvesting
		months	
Apples .. .. .	.. .. .	..	January to April
Bananas	South Queensland: September to January .. ..	..	All year
	North Queensland: May to September .. ..	..	All year
Barley	Grain—May to August	4-5	October to December
Beans, green	South Queensland		
	Highlands: October to January	3	December to April
	Coast: February to October	3	April to December
	North Queensland		
	Tableland: July to September and March, April	2½-3	October, November, May, June
	Coast: March to September	2½-3	May to November
Beans, navy	December, January	3-3½	April, May
Canary seed	April to June	4½-5	November, December
Citrus fruits .. .. .	.. .. .	..	March to September
Cotton	October, November	5-7	April to July
Grapes .. .. .	.. .. .	..	December to March
Hay, lucerne	Perennial; new sowings in autumn .. ..	..	Non-irrigated—Chiefly summer
			Irrigated—All year
Hay, wheaten	April to June	3-5	September
Hay, oaten	April to June	3-5	September, October
Linseed	April to June	4½-5	September to November
Maize	South Queensland: September to January	4½-7	February to July
	North Queensland: November to January	5-7	June to August
Millet and panicum	August to February	3	December to May
Oats	February to July	4-6	October, November
Onions	February to May	5-6	July to November
Papaws	Perennial—New field plantings February to April .. ..	..	All year
Peanuts	South Queensland: October to December	5	March to May
	North Queensland: December, January	5	May, June
Pears .. .. .	.. .. .	..	January to March
Pineapples	Spring: September, October	18	South Coast: January to August
	Autumn: March, April	24	Central Coast: December to May
Potatoes	North Tableland		
	February to August	3½-4½	May to December
	Moreton Region		
	Autumn: January to March	3½-4½	April to June
	Winter: March to May	3½-4½	July to September
	Spring: June to August	3½-4½	September to November
Pumpkins	Early (South Coast): May, June	5-6	October, November
	Main Season: September to January	5-6	February to July
Rice	June, July	5-6	November, December
	November, December	5-6	May, June
Safflower	May to July	4-5	October to December
Sorghum	September to February	4-5	February to July
Soybeans	November to January	3½-4½	April, May
Stone fruits .. .. .	.. .. .	..	November to March
Sugar cane	South Queensland: August to March	12-24	July to December
	North Queensland: April to October	12-15	June to December
Sunflower	Central Queensland		
	December to February	4-5	June to September
	South Queensland		
	August, September	4-5	December, January
	December to February	4-5	June to August
Sweet potatoes	September to February	4-5	February to July
Tobacco	South and Central Queensland: August to November	3½-4½	January to April
	North Queensland: June to September	3-4	September to December
Tomatoes	South Queensland		
	Highlands: October to December	3-4	December to March
	Coast: February to May and July, August	3-4	April to November
	North Queensland		
	March to August	3-4	June to October
Wheat	April to July	4½-5½	October, November

Chapter 3

DISCOVERY, SETTLEMENT, AND DEVELOPMENT

This chapter summarises the history of Queensland from its first known discovery by Europeans. The periods to 1859, from 1859 to 1901, and from 1901 were presented in more detail in the 1974, 1975, and 1976 *Year Books*, respectively.

While the details of discovery, settlement, and development in this chapter of the *Year Book* relate mainly to the activities of European sailors, explorers, and settlers, Queensland had been inhabited by the Aborigines for many thousands of years before Europeans discovered the land.

1 THE ABORIGINES

It is now believed that the Aborigines first populated Australia about 35,000 years ago. Between that time and the first white settlement, no definite facts about Aboriginal history exist although it is possible to postulate certain theories about their patterns of settlement and development.

When the Aboriginal first arrived in Australia, he was roughly at the same stage of development as Neanderthal man in Europe. For a variety of reasons, however, the Aboriginal was to remain in this primitive state until the arrival of the first Europeans. He had no animals capable of being domesticated and he had no crops which were suitable for cultivation. But most of all, Australia possessed a highly agreeable climate compared to the cold of Europe and as such, the Aboriginal was not faced with the same necessity to develop as was his European counterpart—he was able to exist without building substantial permanent shelters and to adopt the simple life of a nomad in his search for food.

It is fairly sure that the Aboriginal had inhabited most of Australia by 15,000 B.C. Apart from this, the only other 'fact' which the anthropologist can hold with any degree of certainty is that the tribal patterns which existed at the white man's arrival had maintained a certain continuity and 'purity' for 5,000 years. This conclusion has been derived from linguistic studies which reveal that individual dialects show little evidence of interaction between tribal groups.

At the time of white colonisation, the Aborigines had a distinct social structure. Little or no evidence exists to say that this structure has altered substantially over the thousands of years of Aboriginal inhabitation. At present there is some dispute over exact definitions of the hierarchical social classifications, but the following summary of a description provided by Norman Tindale in his *Aboriginal Tribes of Australia* commands respect. Essentially, the smallest element in the social structure was the family, or clan, which was male dominated and tied to an ancestral male line. Perhaps the simplest way to understand the patrilineally descended family is to view it as a clan, tied to a given area of land by descent from a common ancestor who was symbolised as a totemic being. Above the clan was the horde which comprised several clans. The membership of a horde was subject to change through inter-marriage. At the apex of the structure was the tribe, a collection of hordes whose wanderings were confined within specific territorial boundaries.

At the time of white settlement almost all of Queensland was inhabited by Aborigines. Tindale has compiled a list of 209 tribes which he believes existed at the time. The average number of persons in each of these tribes was about 450 which meant that Queensland had a total Aboriginal population of approximately 94,000. The size of tribes was not consistent, however, and varied substantially above and below the mean figure of 450.

A dispatch from Sir George Gibbs to Lord Stanley in 1844 provides some indication of Aboriginal settlement patterns in the south-east portion of Queensland. In the dispatch, estimates by S. Simpson, the then Commissioner of Crown Lands, showed that at 1 January 1844, 5,000 Aborigines lived in the Brisbane Valley, 1,500 in the land tract between the Brisbane Valley and Wide Bay, and 3,000 on the coastal strip and islands between the Tweed River and Wide Bay. These estimates were never verified, however, and could be quite inaccurate. Simpson also said that every bay and island between the Tweed River and Wide Bay was inhabited by a distinct tribe. It would be reasonable to assume that this had been the situation for a considerable period of time.

An interesting feature of Aboriginal behaviour is that of the tribes inhabiting the area reaching from the New England Tableland to the Dawson River. Every three years they would migrate to the Bunya Pines of the Blackall Ranges to feast on the pines' seeds. Although each of the tribes had distinct dialects, inter-tribal communication was possible.

There is no simple method of differentiating between the Queensland Aborigines on the basis of physical appearance. Almost all of the early explorers described the Aborigines as erect, robust individuals with beautiful physiques. But even though physical differences did not provide adequate means for broadly categorising the Aboriginal population, there existed a method other than tribal differentiation. The Aborigines themselves adopted this method. They described themselves as the 'fishing people', i.e. the coastal tribes, and the 'mountain people'. A considerable degree of enmity existed between the two.

The major difference in the life styles of the 'fishing' and 'mountain' peoples could be described most adequately as a difference in the ease with which survival was maintained. The coastal tribes had readily available food supplies; fish and shellfish were plentiful and the climate was conducive to the growth of edible vegetables. The inland tribes, more so those occupying the central and western areas, had sometimes to struggle harder for food, however, and occasionally almost reached the point of starvation during droughts.

Apart from this life style difference, great similarities existed in their social structure, in legends of the 'Dreamtime', and in the techniques, talents, and tools employed in their efforts to survive. In general, all tribes exhibited tremendous ability in adapting to their environments and in the development of their own natural capacities.

2 DISCOVERY AND EARLY EXPLORATION

Although it is possible that some European or Asian sailors may have sighted the northern coast of Queensland before the seventeenth century, the first known explorations of the coast were made by Dutch sailors who thought it to be a continuation of New Guinea. William Jansz in 1606 was the first recorded, sailing the *Duyfken* down the west coast of Cape York Peninsula. Others included Abel Tasman, the discoverer of Van Diemen's Land (Tasmania) and New Zealand, who named Cape York Peninsula 'Carpentaria Land'. Major exploration of the coast, however, was not made until the year 1770.

In 1768, Captain James Cook set out on a voyage to the south seas primarily for the purpose of observing the transit of Venus at Tahiti, and then 'to prosecute the design of making discoveries in the South Pacific Ocean by proceeding to the south as far as the latitude of 40 degrees' to search for the continent believed to extend around the Pole. Having performed the first part of his task, Cook searched but failed to find land to the south and so made for New

Zealand, the coastline of which he explored and charted for six months. He then sailed westward and on the morning of 20 April 1770, sighted the east coast of New Holland at Point Hicks (now Cape Everard).

Cook then sailed northwards along the coast. By 16 May 1770 the *Endeavour* was off Point Danger. A day later Cook had reached a point about 6 kilometres from Cape Moreton, which he named Cape Morton after the Earl of Morton, President of the Royal Society. It should be noted that the Morton Bay of Captain Cook was formed by the bend in the outer coast from Point Lookout on North Stradbroke Island to Cape Morton including the South Passage and Rous Channel.

From Cape Morton, Cook sailed northwards towards present-day Noosa, sighted and named Double Island Point and Wide Bay, but passed Fraser Island which he thought to be part of the mainland. Cook charted and named numerous capes, bays, and islands of the coast and landed nine times in what is now Queensland, including six weeks on the banks of the Endeavour River to repair damage after the ship grounded on a reef near Cape Tribulation. On 22 August 1770 Cook landed on Possession Island where he took possession in the name of His Majesty, King George III, of the whole eastern coast from 'the latitude 38 South to this place' by the name of New South Wales.

A few years after the discoveries by Captain Cook, Britain suffered the loss of the American colonies. Faced with the task of finding an alternative place to send convicted felons, the British Government under Pitt decided to establish a penal settlement in New South Wales. The settlement was established at Sydney Cove in 1788, and the first Governor was Captain Arthur Phillip.

Exploration of the land to the north was inevitable, and in 1799 Captain Matthew Flinders in the *Norfolk* charted Glass House Bay (the present Moreton Bay) for two weeks and was responsible for discovering many of the islands in the bay, Mud, St Helena, Green, King, Peel, and Coochie Mudlo, but did not sight the Brisbane River. Flinders found that Cook's Morton Bay (which Flinders wrote as Moreton Bay) was in fact only a channel between Moreton Island and Stradbroke Island.

Three years later, Flinders set out in the *Investigator* to chart the coastline of New South Wales and New Holland. Upon returning, he was able to discount many early theories by proclaiming that he had circumnavigated one land, one continent. He suggested that this continent be called Australia, but it was not until 1824 that the name was officially adopted.

By 1823, it became desirable to find remote areas to which the worst kind of convict could be sent. So in that year, Lieutenant John Oxley, R.N., Surveyor-General, was sent north in the *Mermaid* to inspect Port Curtis, Port Bowen, and Moreton Bay as possible sites for a penal settlement. After finding Port Curtis unsatisfactory and abandoning his intention to examine Port Bowen, Oxley sailed south to Moreton Bay. Following his meeting with the castaways, Pamphlett and Finnegan, from whom he obtained information and some guidance, Oxley was able on 2 December to enter the Brisbane River which he named after Sir Thomas Brisbane, Governor of New South Wales. He rowed upstream as far as Termination Hill (near present-day Goodna) and was much impressed by the beauty of the scenery and the magnificent timber. He was convinced that an inland sea existed and that the Brisbane River, which he named, had its source in some inland lake.

3 THE PENAL SETTLEMENT

In 1824, Oxley, accompanied by Allan Cunningham, in the brig *Amity*, set out with 30 convicts and their guards under the command of Lieutenant Miller, to explore the Brisbane River further and to establish a penal settlement at Oxley's recommended site at Redcliffe Point. After six months the Redcliffe site was abandoned as unsuitable and in February 1825 the penal

settlement was re-established at the present site of Brisbane. By 1827, convicts had also been settled at Limestone (Ipswich) and on Stradbroke Island. Convicts who had committed crimes of a graver nature after transportation were sent to Moreton Bay.

Some of the early accounts of life in the settlement indicate the harsh treatment to which the convicts, particularly those in the chain-gang, were subjected. The chain-gang convicts were continuously shackled, wore drab clothes, and were fed the most meagre of diets. Colonisation of the Moreton Bay region was strictly forbidden. A Government proclamation absolutely prohibited any person unless specially authorised, from approaching within 80 kilometres of the penal settlement.

The local geography of Brisbane in those days is described by Meston in his *Geographic History of Queensland*. There was a muddy mangrove creek running into present-day Albert Street, and a second creek running up to the present corner of Albert and Adelaide Streets, with mangroves to Edward Street. Spring Hill was covered by gums, ironbark, bloodwood, and stringy bark. The Government stockyard was erected on the corner of George and Charlotte Streets and the yard for yoking bullocks stood on the north-east corner of George and Charlotte Streets.

The number of convicts at the settlement varied from about 30 at the beginning to a maximum of approximately 1,160 (including 30 women) in 1833, followed by a decline to less than 100 in 1839.

4 EXPLORATION DURING THE CONVICT ERA

One of the most energetic of the early explorers was Allan Cunningham who came to Australia as a 'Botanical Collector' for the Royal Gardens at Kew. In 1824 he accompanied John Oxley on a detailed exploration of the lower Brisbane River, during which journey they observed the Great Dividing Range and the Marburg Range. Cunningham eventually undertook exploration in his own right and using his own methods. During his many trips into the bush, he sowed various kinds of seeds which he had brought from England, Brazil, and the Cape. He planted these in scattered areas, choosing localities where he believed the plants would best germinate and thrive.

The next important exploration in the Moreton Bay area was carried out by Major Lockyer in 1825. On the instructions of Governor Brisbane, Lockyer investigated a reported sighting near Fernvale Bridge of a tribe of white men with bows and arrows. He did not find a tribe of white men, but he explored the foothills of Mount Brisbane and discovered Lockyer Creek. His findings upset Oxley's theory of the Brisbane River draining an inland sea.

In 1827 Cunningham set out from the Hunter River and headed northwards. Shortly after crossing the Dumaresq River, from a gap on a forest ridge, he obtained his first view of the area he called the Darling Downs. Cunningham wrote: 'At length, on the 5th June, having gained an elevation of about nine hundred feet [276 metres] above the bed of Dumaresq's River, we reached the confines of a superior country. It was exceedingly cheering to my people . . . to observe from a ridge which lay on our course, that they were within a day's march of open downs of unknown extent, which stretched, easterly, to the base of a lofty range of mountains, distant, apparently, about twenty-five miles [40 kilometres].' Describing the country traversed a few days later, he wrote: 'The lower grounds, thus permanently watered, present flats, which furnish an almost inexhaustible range of cattle pasture at all seasons of the year—the grasses and herbage generally exhibiting, in the depth of winter, an extraordinary luxuriance of growth.' In the course of his journey he had also observed a gap in the Great Dividing Range, apparently linking the Downs and the coast, and was anxious to explore it further. He was to do so in the following year, when on 25 August 1828, at his second attempt, he ascended from the east into the pass now known as Cunningham's Gap. In his writings, he mentioned 'the practicability of a high road

constructed through it at some future date'. In 1829 Cunningham explored the country west of Brisbane almost to the Great Dividing Range, settling doubts about the source of the Brisbane River. He also observed coal in the bed of the Bremer River and in adjacent gullies.

Other explorations during the first 15 years of settlement included trips by Andrew Petrie who discovered the bunya pine (*Araucaria bidwillii*) in the Maroochy area, and a study of the Gulf of Carpentaria and neighbouring areas by Captain Wickham and Lieutenant Stokes in 1837.

5 FREE SETTLEMENT BEFORE SEPARATION

By 1839, the end of transportation and the restrictions on the movement of free settlers in the Moreton Bay area were in sight, and in 1840, squatters began to move from the south into the rich grazing lands of the Darling Downs. The first of these settlers was Patrick Leslie who with his brother Walter laid claim to a stretch of the Condamine covering about 40,500 hectares.

News of the good country on the Downs spread in the south, and the early months of 1841 brought a land rush. Many of the early squatters including the Leslies were forced to relinquish some of their land to the settlers who followed. In May 1842, Moreton Bay was officially thrown open to free settlement, and the first land sales were held in Sydney.

Development of the colony accelerated in the 1840s, helped to some extent by the 1841-1844 economic crisis which had a marked effect on settlers in the south, making settlement on the reportedly rich lands of the north more attractive. The first coal seam was opened at Redbank, and a cross-river ferry service was opened from Queen's Wharf to Russell Street, South Brisbane. By 1846, the first Brisbane newspaper was established. Moreton Bay was declared a port of entry and communication was established by steamer between Brisbane and Ipswich.

A population count of the colony was taken in 1845. This showed that there were 1,599 persons, excluding Aborigines, in the Moreton Bay and Darling Downs districts, of which there were 829 in Brisbane and 103 in Ipswich. Brisbane had a number of rivals for the prestige of being the main port of the area. Cleveland, Redcliffe, Sandgate, and Toorbul Point were mentioned as possible sites for the main port as alternatives to Brisbane.

Moves were afoot to have the transportation of convicts resumed. The major proponents of such moves were the squatters, who had suffered from the shortage of cheap labour. They were opposed by the Reverend John Dunmore Lang who was one of the champions of the anti-transportation movement. Dr Lang's scheme to bring in free migrants to relieve the labour shortage was not backed by the Government, with the result that he was almost ruined financially when he went ahead with the scheme and brought in three shiploads of free migrants. Transportation of offenders was resumed for a short time in 1849 and 1850, but opposition to transportation was too strong and it was discontinued.

The town of Gladstone was founded in 1853 as a result of Governor Fitzroy's wish to control the occupation by squatters of land in the northern area. Land was taken up by the squatters in the Wide Bay, Dawson Valley, and Fitzroy Valley areas during the 1850s.

6 THE MAJOR EXPLORATIONS, 1840 TO 1859

There were several motives for exploration of the interior. An overland link was needed between the settled south and south-eastern areas and the northern settlements from which it was hoped to establish trade with Asia. It was hoped that a large river flowing north might be found and more discoveries of fertile land were needed to enable the spread of settlement. Leichhardt, Mitchell, and Kennedy were the major explorers of this period.

Leichhardt's expedition set out from Jimbour in October 1844, with a view to reaching Port Essington, near the present site of Darwin. They travelled across the Dawson River, discovered and named the Comet and Mackenzie Rivers, Peak Downs, and the Isaac, Suttor, and Burdekin Rivers. From the headwaters of the Burdekin, the party journeyed north-west to the Lynd and Mitchell Rivers which they named. An attack by natives resulted in the death of one of the party, but the remainder were able to reach Port Essington on 17 December 1845. A further expedition which Leichhardt led in 1846, from Jimbour to Peak Downs, was a failure when floods and illness overtook the party. In 1848, when attempting to cross the continent from east to west, disaster befell Leichhardt and his party. They vanished somewhere in the interior and their fate remains one of the unsolved mysteries of Australian land exploration.

Sir Thomas Mitchell, the New South Wales Surveyor-General, had carried out considerable exploration in New South Wales and Victoria in the 1830s. In 1845 he set out from Sydney intending to journey to Port Essington. In June 1846 on hearing that Leichhardt had already reached Port Essington, Mitchell abandoned his original objective and instead he explored the Balonne, following it north to the watershed dividing the western rivers from those flowing east and north—the 'Home of the Rivers' area.

In 1848 Edmund Kennedy, a former assistant of Sir Thomas Mitchell, was given charge of an expedition designed to traverse the country from Rockingham Bay up Cape York Peninsula to the Albany Islands. Having failed to rendezvous with HMS *Bramble* at Princess Charlotte Bay, Kennedy pushed on with the Aboriginal, Jacky-Jacky, leaving his other companions behind. Kennedy was killed by Aborigines when almost at Port Albany. Jacky-Jacky buried him, hid his notebook, and managed to reach the Schooner *Ariel* at Port Albany to get assistance for the remainder of the party, of whom only two survived.

Two other explorers, Augustus Gregory and William Landsborough, also carried out important exploration. Gregory led two expeditions in search of Leichhardt. The first in 1855 crossed Australia from the north-west coast to Brisbane in the east. The second in 1858–59 set out from Sydney and explored the area around the Barcoo and Thomson Rivers before following Cooper's Creek and proceeding south to Adelaide. William Landsborough made many exploratory trips at his own expense, including exploration of the Peak Downs and Nogoa areas. In 1861 he traced the Gregory and Herbert Rivers to their source and named both rivers. The next year in search of Burke and Wills, he crossed the continent from the Gulf of Carpentaria to Melbourne.

7 SEPARATION FROM NEW SOUTH WALES

In 1851 gold was discovered in New South Wales and Victoria and the growth in population and wealth of the colonies seemed assured. In Queensland, gold discoveries at Canoona in 1858 soon petered out, but not before 16,000 people had crowded to the field. It was Canoona which gave birth to the town of Rockhampton.

By 1857, parliaments had opened in New South Wales (which still included present-day Queensland), Victoria, South Australia, and Tasmania. In the northern settlement, agitation for separation from New South Wales grew and continued to gain popular support. The squatters, either giving up hope of overcoming the popular antagonism to transportation or perhaps believing that they would have greater influence in obtaining a revival of the 'exile' project in a separate State, joined with those who sought unconditional separation.

A separation at latitude 30 degrees south had originally been considered by the British Government, but objections from the New South Wales Legislative Council and a lack of enthusiasm by the New England and Northern Rivers settlers for rule from Brisbane prevailed. When the colony was declared the border was well to the north—commencing at Point Danger thence following in a westerly direction the mountain range and the Macintyre River to a point

where the latter intersected the 29 degrees south latitude, which it followed to the 141 degrees east longitude and by that line north to the Gulf of Carpentaria.

On 6 June 1859, Letters Patent were issued creating a new colony, called Queensland. Sir George Ferguson Bowen was to become the first Governor. Two houses of Legislature were established—the Legislative Council, modelled on that of New South Wales, consisting of members appointed for life, and the Legislative Assembly, an elective body.

8 THE SEPARATE COLONY

Sir George Ferguson Bowen proclaimed the separation of Queensland from New South Wales and was sworn in as Governor on 10 December 1859, and set about creating the machinery of government.

Robert George Wyndham Herbert, who was later to become the first and also the youngest Premier of Queensland, was appointed Colonial Secretary and First Minister, while Ratcliffe Pring was made Attorney-General. The Governor, Herbert, and Pring formed the Executive Council. Sixteen electoral districts were drawn up, from which 26 members were elected, and on 22 May 1860, in a stone building once used as convict barracks, the first Queensland Parliament assembled.

On separation, the existing laws of the parent colony of New South Wales continued in force in Queensland. The Statute Book of 1860, however, contained *inter alia* a Primary Education Act and a Grammar Schools Act which provided for the establishment and maintenance of schools, the promotion of primary education in the colony of Queensland, and the administration by a Board of funds provided by Parliament or otherwise for that purpose. These Acts were remarkable in that provision for public expenditure on education had in most countries to that time held a low priority.

At the 1861 Census the non-Aboriginal population of the State was concentrated in the south-east, and consisted of 18,121 males and 11,938 females. Of the total population (30,059), 42.9 per cent were uneducated, i.e. unable to write, while 30.7 per cent could neither read nor write. In 1861 there were 1,358 hectares of land under cultivation, 3,449,350 sheep, 432,890 cattle, and 23,504 horses.

Horses and drays were the only means of transport in the new colony, and the only formed road was between Brisbane and Ipswich. In spite of danger from hostile natives and bushrangers, the mail service extended as far north as Rockhampton. In 1861, Queensland's first telegraph linked Brisbane to Ipswich, Toowoomba, and Sydney.

The first Parliament in 1861 passed a series of Land Acts and laws providing for municipal government and the transfer of real estate under the Torrens system. In the early 1860s a number of towns outside Brisbane were constituted: Ipswich, 2 March 1860; Rockhampton, 13 December 1860; Maryborough, 23 March 1861; Warwick, 25 May 1861; and Gladstone, 20 February 1863.

The western boundary of Queensland in 1859 was the 141st meridian of east longitude. In 1860, however, the Queensland Parliament requested the permission of the Imperial Government to redefine the western boundary north of South Australia at the 138th meridian. This request was granted in 1862, and enabled Queensland to annex an additional 310,800 square kilometres, including good-season fattening country for cattle.

The Herbert Government began an extensive program of railway construction. A tender from Peto, Brassey, and Betts of England was accepted for the construction of 34 kilometres of line from Ipswich to Bigge's Camp (Grandchester) for £86,900 (\$173,800). This railway, with a gauge of 1.07 metres, was opened to traffic on 31 July 1865.

Thereafter, railways were constructed rapidly. The first train arrived at Toowoomba from Ipswich on 12 April 1867 and the railway to Dalby was opened on 16 April 1868. Roma was linked by 16 September 1880 and Charleville by 19 October 1887. The first sod of the Brisbane to Ipswich railway was turned on 30 January 1873; the line was opened on 14 June 1875. The Indooroopilly railway bridge was opened on 5 July 1876 by Governor Cairns. The first through trains from Brisbane to Sydney ran on 17 January 1888. By 1901, 4,510 kilometres of line in Queensland had been opened to traffic.

There was also a need for a form of transport which could cope with the rough bush tracks. Cobb and Co. established their Brisbane office in 1865 and met with such success that by 1890 they were reported to be using 4,000 horses a day and travelling 26,000 kilometres a week.

9 THE 1866 FINANCIAL CRISIS

In mid-1866 the colony was caught in an acute financial crisis. In London, the failure of the Agra and Masterman's Bank which had been financing the Queensland railway loan meant that the supply of funds was cut off, and all public works in the colony practically ceased. Serious riots broke out among retrenched railway navvies. The Treasurer, Joshua Bell, sought to issue inconvertible legal tender notes, but Governor Bowen refused to promise Royal Assent to the Bill, and the Macalister ministry resigned. The former Premier, Mr Herbert, leading a stop-gap ministry, passed a measure empowering the Government to raise £300,000 (\$600,000) by the issue of Treasury Bills. This move restored the credit of the Government and when Herbert's temporary ministry resigned, Macalister again took over.

10 GOLD DISCOVERIES

In 1867 gold was discovered at Gympie by James Nash, and as the rush to Gympie set in, some sensational yields, including a 1,000 ounce (about 30 kilograms) nugget, were obtained from the field. Other major fields discovered were: Cloncurry in 1867, Cape River (which attracted a large influx of Orientals) in 1867, Ravenswood in 1868, Etheridge in 1870, Charters Towers in 1872, the Palmer in 1873, Hodgkinson in 1875, Mount Morgan in 1882, Croydon in 1883, and Mareeba in 1893. The most spectacular of all Queensland fields was the Palmer, which attracted an estimated 15,000 Europeans and 20,000 Chinese in three years. The rush of Chinese to the fields gave rise to some resentment, and various restrictions were introduced in 1877: a poll-tax was levied on Chinese entering Queensland; a special licence fee was levied on aliens mining for gold; the import duty on rice was increased; and aliens were prohibited from working on newly discovered fields. Recorded gold produced on the Palmer from 1873 to 1893 was reported to be 41,493 kilograms.

The Mount Morgan field, discovered by the Morgan brothers, was an even richer field than the Palmer. This 'mountain of gold' has produced over 227,000 kilograms of gold, and thousands of tonnes of copper.

11 PASTORAL EXPANSION

In 1862 Sir George Bowen had recommended that Port Albany on Cape York was a suitable site for a settlement to be used as a garrison post, coaling station, and harbour of refuge. A Mr Jardine, Police Magistrate at Rockhampton, was chosen to superintend the new settlement which was named Somerset. Jardine went to the new area by ship while his two sons, Alexander and Frank, moved overland with cattle and horses. The journey was a long (2,600 kilometre) and dangerous one, with trouble from Aborigines and heavy stock losses. Frank Jardine spent the rest of his life in far north Queensland as a pastoralist and with some interest in pearling. The

settlement at Somerset became a base for pearling luggers, but in 1877 the official settlement was transferred to Port Kennedy on Thursday Island.

Further south, settlement continued to spread into the Warrego and then into the Channel Country. The pastoralists and their wives and families endured hardships, but like so many of our pioneers there was always the prospect of moving on to new or better land and they were not slow to gamble the risks of the unknown for possible fortunes. Flocks of sheep and herds of cattle poured into Queensland from the south to stock the newly developing areas.

In the north and north-west the pastoralists were also pushing forward, and settlements developed in the Hughenden, Valley of Lagoons (west of Ingham), and Mareeba districts. Christy Palmerston, 'the prince of pathfinders', did much to open up the Cairns and Herberton hinterlands. His name is commemorated in the Palmerston Range and the Palmerston Highway.

12 EFFECT ON THE ABORIGINALS

A brief outline of the Aboriginal society prior to European settlement has been included in Section 1 of this chapter.

There is no doubt that the coming of the white man had a profound and detrimental effect on the Aboriginals' long-established life-style and, according to Archibald Meston, 'probably no other savage race has suffered more than the Australian aboriginals from the misrepresentations of prejudice or ignorance'. The explorers had a great respect for them but the influx of white settlers and their livestock to the most fertile and well-watered areas deprived the Aboriginals of their hunting and fishing grounds, scattered the native animals, muddied the streams, and desecrated the sacred places of the tribes.

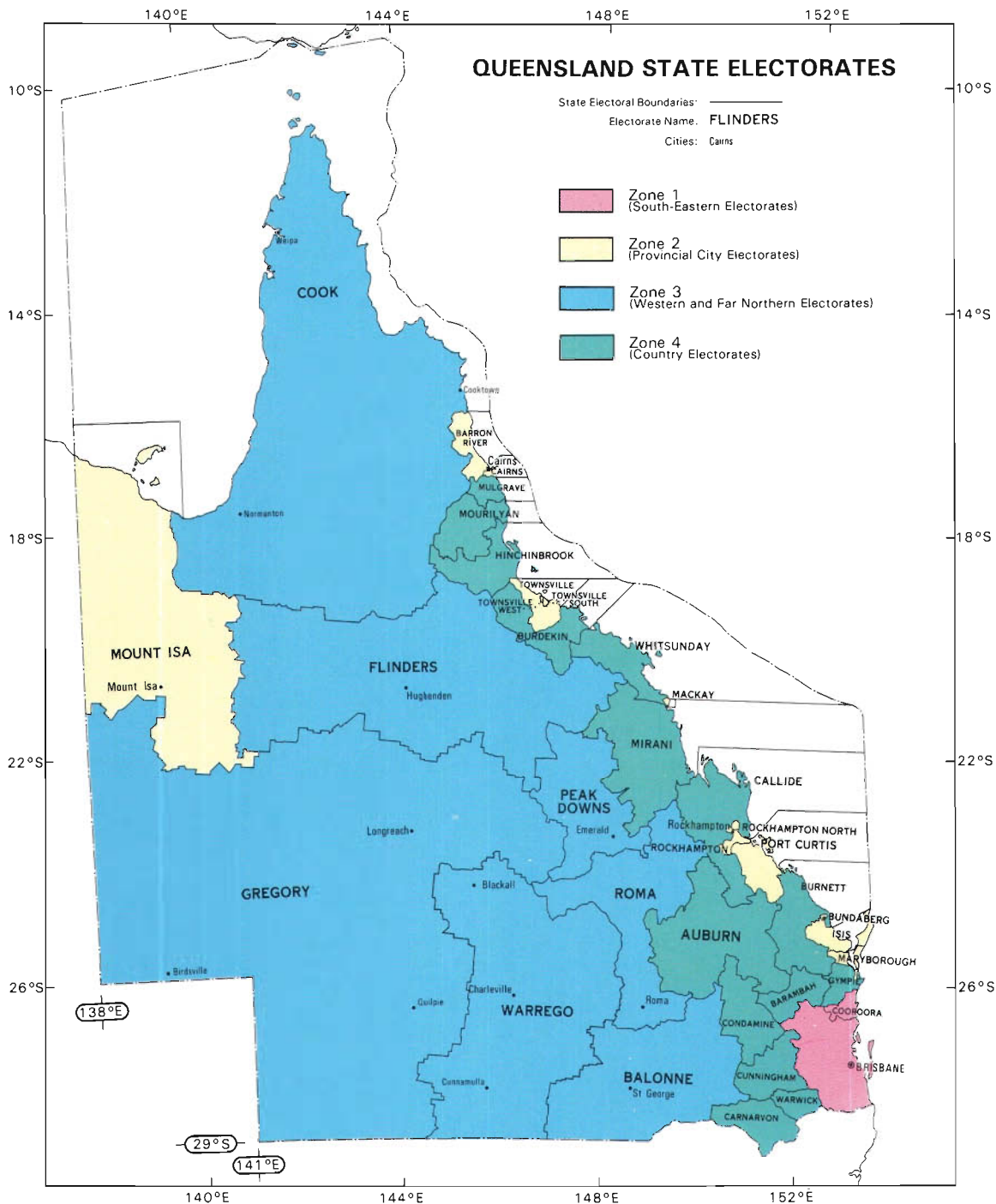
There were numerous clashes between the Aboriginals and the white settlers, one of the worst in this period being the massacre on 27 October 1857 of 11 white men, women, and children at Hornet Bank on the Dawson River. In 1861 a massacre in which 19 men, women, and children were killed occurred at Cullin-la-ringo (or Cullinaringo) on the Comet River in central Queensland. The Aboriginals were pursued and punished by squatters and native police. Justice did not consist of arrest and trial, but simply reprisal killing of Aboriginals, if possible from the particular 'guilty' tribe.

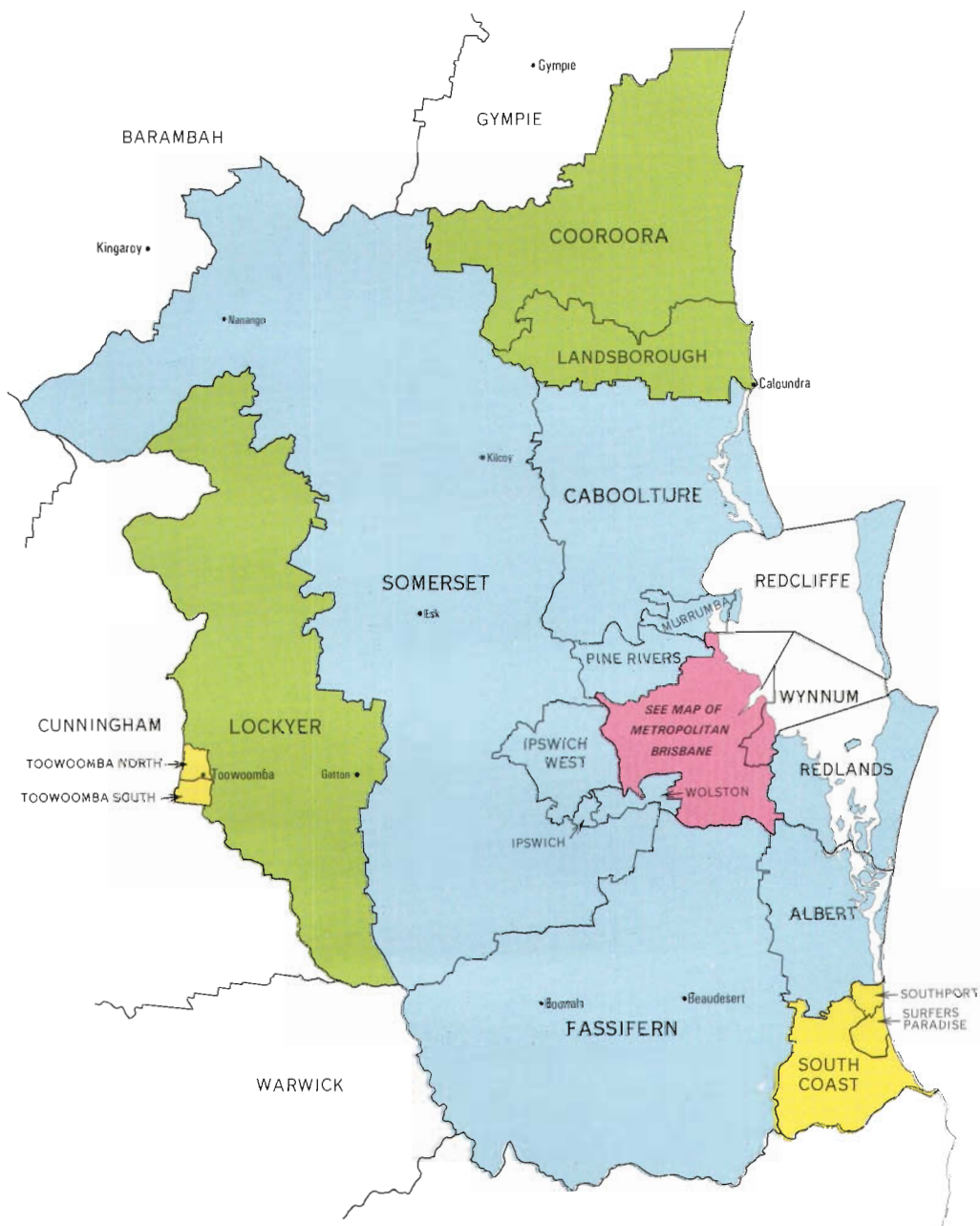
The Aboriginal warriors were extremely courageous, and in many areas attempted to drive the settlers from tribal lands and sacred places. They soon found, however, that their weapons were no match against the guns of the settlers and the Native Mounted Police. The elite warriors of the Kalkadoon tribe of Cloncurry were fearless and several times fought the settlers and the police who were led by Inspector Urquhart. Bitter fighting between Aboriginals and Europeans also occurred on the Palmer goldfield trail.

In 1895, the Government of Queensland appointed Mr Meston (Protector of Aboriginals) as Special Commissioner to inquire into the activities of the Native Mounted Police. His recommendations included the abolition of the Native Mounted Police and their replacement by white police assisted by unarmed black trackers, imprisonment for those who sold liquor or opium to the Aboriginals, and the creation of large reserves for Aboriginals only, with suitable land for game and cultivation, food centres, and other amenities.

13 LAND LEGISLATION

When the first Parliament assembled in 1860, the division of opinion on land policy was immediate. Pastoralists were anxious to retain large areas with secure tenure and low rentals, while the town interests pressed for small areas to promote business and social interests. As the town influence became greater, the squatting interests were progressively forced on the





QUEENSLAND STATE ELECTORATES SOUTH-EASTERN ZONE

State Electoral Boundaries —————

Electorate Name SOUTH COAST

Cities Toowoomba

- | | |
|---|---|
|  Zone 1 Group 1
(Brisbane Electorates) |  Zone 1 Group 2
(Other City Electorates) |
|  Zone 1 Group 2
(Near Brisbane Electorates) |  Zone 1 Group 2
(Other Country Electorates) |

QUEENSLAND STATE ELECTORATES BRISBANE AREA

Zone 1 Group 1

State Electoral Boundaries

Electorate Name

SOUTH BRISBANE



Core City Electorates



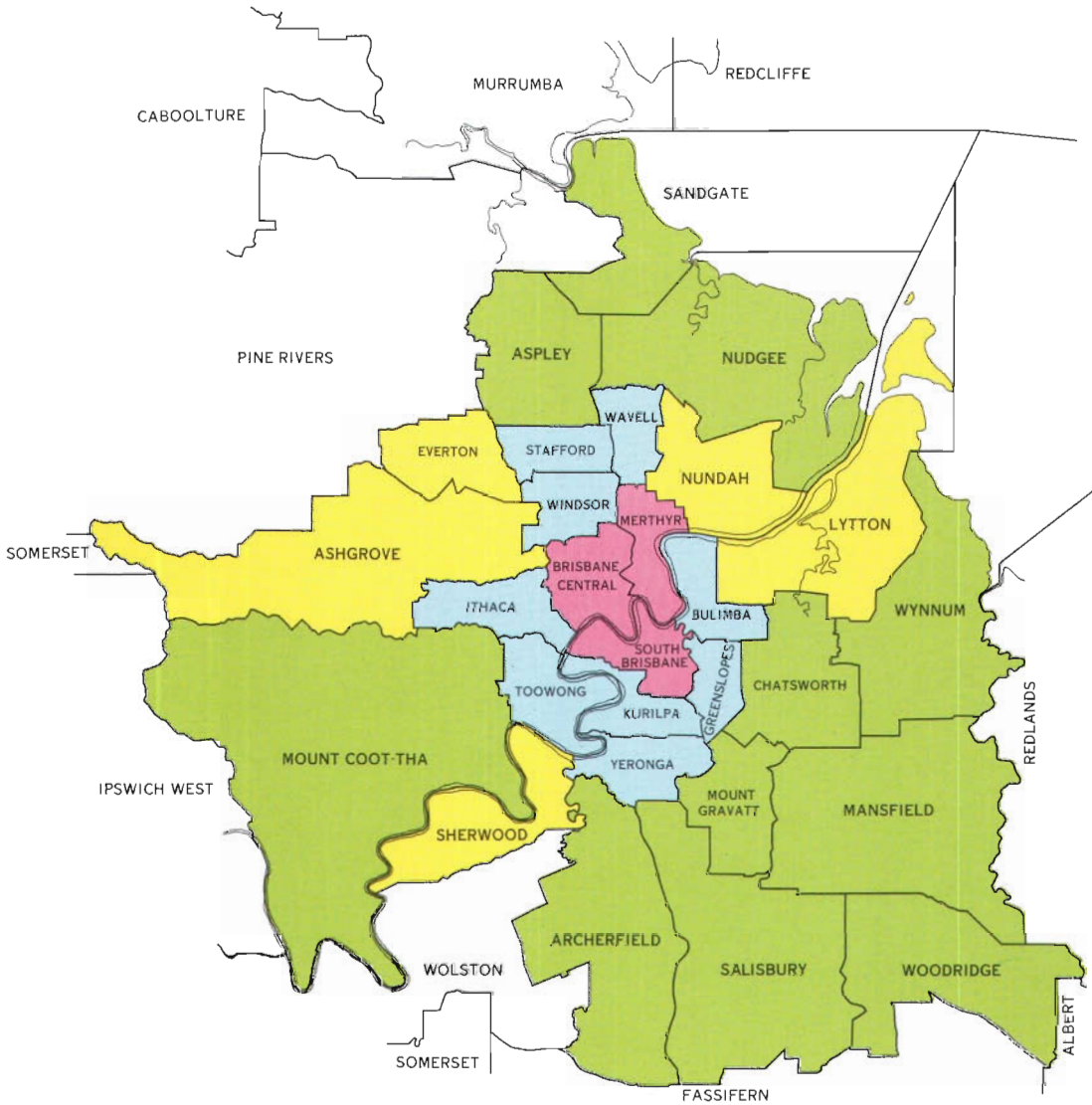
Inner and Outer Suburban Electorates

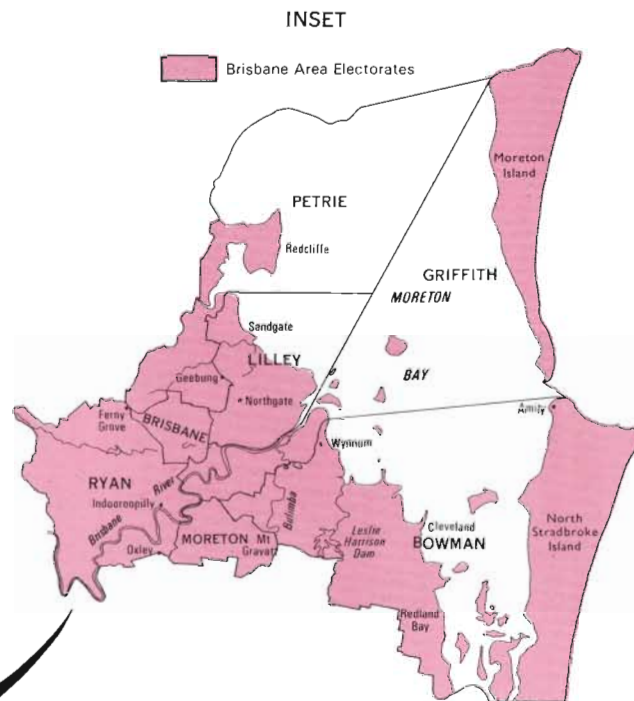
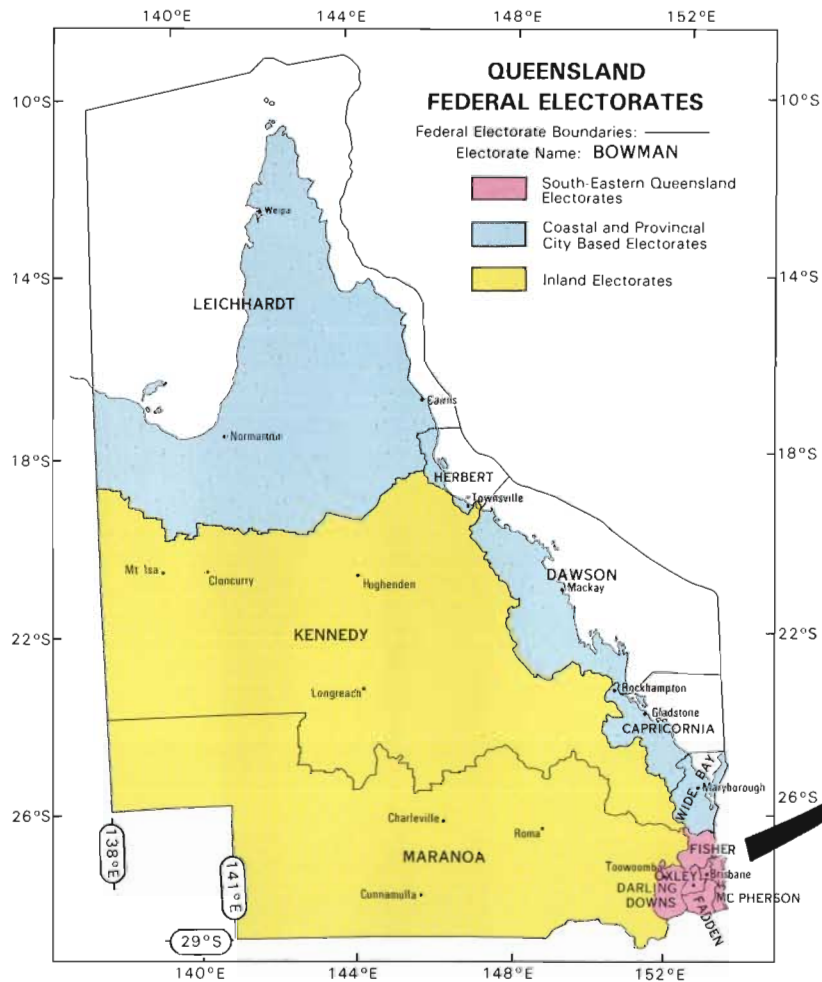


Inner Suburban Electorates



Outer Suburban Electorates





defensive. By 1859 a total of 34,983 hectares had been alienated, consisting of 530 hectares of town and suburban allotments, and 34,454 hectares of country lands.

The first Parliament passed three Acts dealing with Crown Lands. The first two dealt with the pastoral aspect, and altered regulations relating to stocking the land, conditional leases, and rentals. The third Act passed in 1860 provided for general settlement and set aside Agricultural Reserves in settled districts.

The *Crown Lands Act*, 1868 consolidated all previous land legislation and authorised the appointment of land commissioners and land rangers. The *Pastoral Leases Act* of 1869 allowed squatters to freehold up to 1,037 hectares of their runs. A Land Board and Land Board Courts were established under the *Crown Lands Act* of 1884 (the Dutton Act) to deal with matters relating to rents, compensation, leases, and land settlement. The Land Court was established under the *Land Act*, 1897 and enlarged the provisions for Agricultural, Grazing, and Scrub Selection tenure.

It has been said that 'man will brave all hardships and perils to acquire land and knows few restraints in the struggle to retain it'. It is easy then to understand the many changes to land laws.

14 AGRICULTURE, SUGAR CANE AND THE KANAKAS

At separation, the colony was mainly dependent on pastoral activities, but agriculture gradually expanded, even though it was at first confined to coastal lands.

Warwick was the first district in which wheat was grown on a large scale. A flour mill was erected at Warwick in the early 1860s and, until the advent of steel rollers, immense stones were used to grind the grain.

Because of a shortage of cotton due to the American Civil War, a special bonus was paid to stimulate cotton production and between 1867 and 1874, 4,556,175 kilograms of cotton were grown and exported. When the bonus was abolished, farmers switched to growing other crops, including sugar cane. Sugar cane was grown on the banks of the Brisbane River, but disastrous frosts in three successive years caused the decline of the industry in that area. Interest in cane growing quickly spread north to Mooloolaba and to the Maryborough, Mackay, Townsville, and Cairns districts. The industry prospered and in 1900–01, 865,000 tonnes of sugar cane were harvested from 29,424 hectares, yielding 95,000 tonnes of raw sugar.

Much of the manual labour on the sugar plantations in the early years was done by Kanakas, the name given to indentured Pacific Island labourers. Captain Robert Towns, who was violently attacked by the press of the day and accused of introducing the 'slave trade' to Queensland, was responsible for the introduction of Kanakas in 1863. In 1883 there were an estimated 13,000 Kanakas in Queensland.

In 1885 Premier Griffith appointed a Royal Commission to inquire into the system of Kanaka recruitment and treatment. The findings were described as 'a terrible indictment of deceit, cruelty, treachery, deliberate kidnapping and cold-blooded murder'. As a result, Griffith brought down a Bill providing that no more licences to recruit Pacific Islanders should be issued after the end of 1890. The demand from the sugar areas for the retention of the Kanakas was strong, however, and in 1892 Griffith unexpectedly decided to extend the period for the introduction of Kanakas by 10 years. With Federation and the establishment of the Commonwealth, however, the system was brought to an end.

15 THE SHEARERS' STRIKE OF 1891

In 1891, a shearers' strike was called in protest against the insistence by the Employers' Federation of the recognition by the Australian Labour Federation of the principle of freedom of contract. The shearers were unwilling to accept freedom of contract, i.e. the right of any

worker to accept work from any employer and the right of any employer to engage any man wanting work. When non-unionists from the southern colonies were brought in, the shearers formed encampments to prevent this labour from going to work. As the shearers continued to form encampments, burn woolsheds, and practise sabotage and intimidation, a state of virtual martial law was enforced, and some of the strike leaders were arrested and imprisoned.

The 1890s saw the Labour Party, which had previously worked through its influence on existing political parties, emerge as a strong political force. William Lane, through his writings in the *Worker* newspaper, was influential in this growth. In the elections of May 1893, 15 Labour members were elected. These included Andrew Fisher (later Prime Minister) and Andrew Dawson, who in 1899 formed the first Labour Government which, however, survived only six days.

16 ANNEXATION OF NEW GUINEA

After Separation, the Government of Queensland annexed several islands of the Great Barrier Reef, Torres Strait, and the Gulf of Carpentaria and attempted to have the Imperial Government annex New Guinea.

The earliest attempts to annex New Guinea were in 1793 by two East India Merchantmen, and in 1846 by Lieutenant Yule of HMS *Bramble*. Neither of these actions, however, was confirmed by the British Government.

In 1873, Captain Moresby, after discovering an excellent landlocked harbour on the south coast of New Guinea, took possession of eastern New Guinea. Due to differing opinions among the Australian colonies about assuming responsibility for the new territory, the British Government did not confirm Moresby's action.

The Premier of New South Wales, Henry Parkes, in 1874, wrote a memorandum to the Imperial Government pointing out the desirability of British colonisation of New Guinea, but as he was not supported by the Governor of New South Wales, no action was taken. Despite the discovery of gold in New Guinea in 1878, and attempts by Queensland to establish informal control over the island, no annexation took place.

At this time, Germany was becoming increasingly interested in the Pacific, and sensing changes, the Queensland Premier, Sir Thomas McIlwraith, cabled a request in 1883 for annexation of New Guinea offering to defray the costs of occupying and defending the settlement. Pending a reply, the Premier ordered that possession be taken of the remaining area of the island not under Dutch control. This order was carried out in April 1883.

Lord Derby, the British Colonial Secretary, refused to sanction McIlwraith's action, despite a now united offer by the Australian colonies to share the costs of administration. While the British Under-Secretary for the Colonies was conferring with Prince Bismark on the subject, Germany annexed the northern part of New Guinea and several of the adjacent islands. The remaining southern portion was then annexed by the British in November 1884, and administered by Queensland at the joint expense of the six colonies.

The trouble over the New Guinea annexation, resulting from the absence of a united authority to speak for all the Australian colonies, was one of the events which led to Federation and the forming of the Commonwealth in 1901.

17 COLONIAL LIFE

It has been possible to detail only some of the principal developments in Queensland in the period 1859 to 1901. The following list of events is intended to provide some social and economic background to life in the colony.

The Eight-hour Day Movement

The first organised attempts to win an eight-hour day occurred at a meeting on 8 September 1857. In 1858, the eight-hour day operated for the first time in what is now Queensland at Petrie's, the stone masons, and rapidly spread throughout the building industry. In 1890, the Eight-hour Bill was passed by the Legislative Assembly but rejected by the Legislative Council, and the struggle continued into the twentieth century. The eight-hour movement was an issue which united the workers in various industries, and this was important for the growth of the Labour Movement in Queensland.

Gas Lighting

Gas lighting for Brisbane businesses was first used on 29 November 1865, and other centres soon followed: Rockhampton in 1874, Ipswich in 1878, and Warwick in 1879.

Major Fires

Great fires occurred in Brisbane in December 1864, October 1866, and December 1868. Completion of the Enoggera Waterworks in 1866 and the connection of water to the city was a great help in fighting fires.

Education

Free education was introduced into Queensland on 1 January 1870. *The State Education Act of 1873* provided for education in Queensland to be free, secular, and compulsory.

Wool Sales

The first wool sale in Brisbane opened on 27 October 1891.

Year of Crisis and Disaster, 1893

Values, particularly real estate, fell and eight of the eleven banks of issue in the colony were forced to close their doors. Floods in many parts of Queensland caused great loss and damage, and the Indooroopilly railway bridge and Victoria Bridge were both swept away.

Factories

In 1900 there were 2,078 factories employing 25,953 persons with a value of output of £7,916,364 (\$15,832,728). Of these factories, the most numerous were metal works (329), sawmills (222), and butter, cheese, etc. factories (199).

Townsville

The Port of Townsville had grown by the end of the century to such an extent that it was next in importance to Brisbane. The North Queensland Railway was connected to the wharves, so that cargo in railway trucks could be brought right down to the ships.

18 FEDERATION

The events in New Guinea provided impetus to the Federation movement and in 1885 a Federal Council was established. The first Australian Federal Convention, held in 1891, led to the preparation of a draft constitution. Further Conventions were held, the Federation movement gathered greater momentum, and finally on 1 January 1901, the Commonwealth of Australia was proclaimed. The Constitution gave the Parliament of the Commonwealth legislative power with respect to a large number of specified matters of direct relevance to the Commonwealth as a whole.

At the Census of 31 March 1901, the population of Queensland, excluding Aborigines, was 498,129, and that of Australia was 3,773,801.

19 GOVERNMENT IN ACTION

Social and economic change is frequently associated closely with the practices and policies of government and for these final sections of the history, a brief description of major governmental action is given first, followed by general descriptions of social and industrial changes and innovations.

One of the most significant political innovations of the early part of the century occurred in 1904 when the franchise was extended to women. In 1914, legislation providing for compulsory voting was enacted, a Queensland 'first', to be subsequently followed by all other States.

The period between 1908 and 1914 was one of general economic prosperity and the government which had been elected in 1908, undoubtedly aided by this prosperity, exhibited a degree of stability not previously evident. Major initiatives during this period included the commencement of an ambitious railway construction program and the establishment and endowment of the University of Queensland.

A Labour Government, elected in 1915, immediately embarked on programs of industrial legislation and the formation of State enterprises. Much of the industrial legislation proved successful, e.g. the establishment of the Arbitration Court, but with the exception of the State Government Insurance Office, most of the State enterprises were financially disastrous. The year 1916 was remarkable for the bitter divisions, both politically and amongst the general population, over the issue of conscription.

In the years immediately following World War I, rapidly rising prices gave cause for concern, particularly increases for essential basic commodities such as foodstuffs and clothing. To combat this, the then Labor Government invested a Commissioner of Prices with the power to fix the price of any commodity. This economic instability was only temporary.

In 1922, at the instigation of the Theodore Labor Government, the Legislative Council, the Upper House of Queensland's bicameral Parliament, was abolished leaving only the Legislative Assembly. Since then, the Queensland Legislature has functioned as a single Chamber, a unique situation among State Parliaments. Another significant political change followed three years later: the creation of Greater Brisbane, the largest municipal council in Australia. As such, Brisbane contained a substantial proportion of the State's population and industry. From the outset, the Brisbane City Council was elected by a full adult electorate. No property qualification was required.

The Labor Government which had held office since 1915 was replaced by a Country-National Government in May 1929. While in office the new Government abolished State trading and established a Bureau of Economics, and during its term the first woman was elected to the Queensland Parliament. The Government had come to power at a difficult time and was faced with rising unemployment, falling incomes, and the social distress of the depression years. A system of relief work instead of rations was introduced for unemployed married persons.

No State Government of the time was able to rectify the economic situation and along with Governments in all other States, the Government in Queensland was removed from office. It was replaced by a Labor Government which began its term by endeavouring to stimulate industry and by spending large amounts of money on projects in the public sector to help overcome the unemployment problem. Several important projects such as the Story Bridge, the Stanley River (Somerset) Dam, and construction of the University of Queensland at St Lucia were commenced. By 1934 the worst of the depression was over. In 1935 a complete revision of health

and medical services was instituted and hospital and maternal and child welfare services were expanded considerably. A free hospital service was introduced in 1945. Shortly after World War II, the Government also initiated several large irrigation projects, including the Burdekin and Tully hydro-electric schemes and the Mareeba-Dimbulah project. The Labor Party retained office until 1957 when a Country (now National)-Liberal coalition was elected. The coalition retained power until the election of a National Party Government in October 1983.

In recent years Queensland has seen extensive industrial development, especially in the field of mining where the State's large mineral deposits, particularly coal and bauxite, have been exploited. The development of irrigation and railways has continued and the expansion of secondary industries has been fostered by encouraging enterprises from the southern States to locate in Queensland. Major legislation in the fields of consumer protection and judicial reform have also been introduced and encouragement provided to the tourist industry which is now a substantial revenue earner in Queensland.

The present Premier of Queensland, the Hon. Johannes Bjelke-Petersen, has retained office continuously since his election to the position in August 1968 on the death of the Hon. J. C. A. Pizzey.

20 AGRICULTURE

Since 1901 there has been remarkable growth and development of agriculture in Queensland. Some of the most important developments have been:

- (i) the spread of wheat and other crops into the drier areas west and south-west of the Darling Downs;
- (ii) the mechanisation of agriculture including the bulk handling of grains and sugar;
- (iii) the expansion of grain sorghum and the introduction of new crops such as oil seeds;
- (iv) improved marketing and the establishment of canning facilities;
- (v) the extension of irrigation; and
- (vi) scientific plant breeding and the introduction of improved varieties from overseas.

Only a brief description of some of these developments is possible here. The reader is referred to the Land Settlement and Agricultural Industries Chapters for further details, but it may be worthwhile to touch on the development of the marketing systems and the scientific advances in the development of new plant varieties.

The organised system of marketing which now exists in Queensland for many primary products was not introduced until 1923. In 1922, a Provisional Council of Agriculture had appointed Standing Committees to inquire into general aspects of the administration of agriculture. As a result of these Committees' activities, it was suggested that a Committee of Direction of Fruit Marketing (C.O.D.) be formed to bring about orderly marketing. The C.O.D. was established on 15 November 1923 and commenced business on 1 January 1924. It gave the growers a voice in determining marketing policy and one of its most important initiatives was the establishment of the Northgate Cannery in 1947.

Agriculture, including horticulture and viticulture, in Queensland also owes a great deal to the work of plant breeders. Research in the sugar industry has produced satisfactory varieties of cane for growth in Queensland. Grain crops (wheat, barley, maize, and grain sorghum) have benefited from plant breeding and testing of new varieties from other States and overseas. Work also has been done in developing new varieties of other crops including fruit and vegetables. Complementary to the development of new plant varieties is research directed to the control of noxious weeds, probably the most spectacular success occurring in the control of the prickly pear.

21 THE LIVESTOCK AND MEAT INDUSTRIES

Meat Cattle

By 1900 Queensland had almost 50 per cent of the meat cattle in Australia. Although this proportion has declined over the years, Queensland still maintains a prominent position in the industry. The profitable expansion of meat cattle herds has been greatly assisted by the export of chilled and frozen meat. Until the end of World War II, meat exports were almost exclusively in the form of frozen meat. Following the opening and subsequent development of the Japanese market and the introduction of refrigerated container shipping, however, the chilled meat trade has assumed major proportions, especially since the late 1960s.

In spite of its prosperous development, however, the meat industry has had to face serious difficulties. Attempts have been made to overcome the major problem of drought by providing better watering facilities, pasture and property improvements, and by breeding cattle with greater capacity to exist in dry conditions. The cattle tick also has been a constant, serious threat to the industry's prosperity. Its spread over much of the State has led to the need for costly control measures—spraying and dipping cattle and government control of stock movements. Government control also has been necessary in the control of diseases such as pleuro pneumonia and tuberculosis.

Dairy Cattle

In the first half of the century, the dairying industry in Queensland increased in importance as population grew and butter and cheese factories were established. But since 1943 when the milk cattle population reached 1,574,000, there has been a gradual decline in numbers, except for short periods in the late 1940s and early 1950s. The last few years have seen a rationalisation of the industry and with government assistance many marginal holdings have been combined into larger and more economically viable units. Milk cattle are grazed mainly in the coastal areas of south-east Queensland and on the Atherton Tableland.

Sheep

Sheep numbers in Queensland have fluctuated considerably, mainly as a result of drought. Following a severe drought in 1902, numbers fell to 7.2 million, only a third of the level 10 years previously. By 1910, the numbers once more had passed 20 million and although the fluctuations since then have not been as great, drought still is a serious problem. Almost all sheep in Queensland have been raised for wool production, and nearly all are pure-bred merinos.

22 MINING

Mount Isa was the only major mineral discovery during the period 1901–1950, and its potential only became apparent after 1950. Since 1950, however, mining has shown tremendous expansion in Queensland.

During World War II, Mount Isa Mines Limited switched production from lead to copper, while during the post-war period the operation has been that of dual copper-lead extraction. In 1953–54, more than one million tonnes of ore were treated for the first time. In 1954, additional copper lodes were discovered at Mount Isa. Consequently the company decided to construct its own electrolytic copper refinery at Townsville. It was opened in 1959.

In 1954, uranium was discovered at Mary Kathleen, 64 kilometres east of Mount Isa, and subsequently in 1956 an \$80 million contract was signed for the supply of 4,085 tonnes of uranium oxide to the United Kingdom Atomic Energy Authority. On completion of this contract the mine was placed on a care and maintenance basis in the face of overseas competition. It was re-opened in 1975 when profitable exports became possible but closed again in 1982.

Another discovery of the 1950s was that of bauxite at Weipa. Since then Weipa has become the world's largest single bauxite mining and shipping centre, drilling tests indicating that the site has about 11 per cent of the world's known reserves. To process this bauxite the largest alumina plant in the world has been established at Gladstone.

Other major mining developments and discoveries have included: the exploitation of the large coking fields of the Bowen Basin and the associated construction of railways and port facilities; the discovery of oil and natural gas at Moonie and Roma in the 1960s; the discovery in 1967 and subsequent development of high-grade nickel laterite at Greenvale; the discovery of phosphate deposits south-east of Mount Isa; and the extraction of mineral sands—rutile, zircon, ilmenite, and monazite—from the beaches of the southern coast of Queensland.

23 MANUFACTURING

In Queensland at the end of last century and well into this century, manufacturing was confined largely to the processing of primary products together with local and workshop production. Only a limited number of industries competing with imports were established, and these were restricted to south-eastern urban centres.

The level of manufacturing industry increased only gradually, and even this growth was retarded by the depression of the 1930s. In 1940, the Queensland Government appointed a Committee to investigate secondary industry. In its report, the Committee considered assistance to industry of such importance that it recommended a separate Minister be appointed to be responsible for secondary industries.

In the post-war period, Government action together with population growth (caused both by natural increase and immigration) has led to the establishment of more industries. The Government is strongly committed to the encouragement of the State's industrial development. With few exceptions, however, the major part of Queensland's industry is still linked to primary products from crops, livestock, or minerals.

24 EDUCATION AND HEALTH

Education

Legislation providing for compulsory education of children between 6 and 12 years of age was enacted in 1875 and proclaimed in 1900. The vast area of the State, however, was a major factor inhibiting the spread of schooling to all children. Several schemes were initiated in the early part of the century to assist in providing education to children in remote areas, culminating in the establishment of the Primary Correspondence School in 1922. This tuition has been supplemented by the Schools of the Air since 1960.

With the raising of the school leaving age to 14 years in 1910, secondary education, which was provided by Grammar Schools with financial assistance from the Government, became a high priority. The first State high school was established in 1912. Secondary education was made open to all students in 1963 with the abolition of the Scholarship Examination, and in the following year, the school leaving age was raised to 15 years. Since 1973, a system of school-based internal assessment has replaced the Junior and Senior Public Examinations.

In 1923, special classes were formed for children with intellectual handicaps. In 1931 the State accepted responsibility for the provision of educational facilities for blind, deaf, and dumb children. Improvements were made in special education in the 1970s with the establishment of country special schools and special education units.

Pre-school education has experienced a period of rapid growth since 1973. A pre-school correspondence program is provided for children in remote areas of the State, and special pre-schools cater for physically and intellectually handicapped children.

Migrant children and adults are provided with tuition in oral and written English in special classes, in schools, and by correspondence lessons.

Since World War II, there has been a considerable increase in the number of students undertaking studies at university level. In 1949 the University of Queensland, which opened in 1911, transferred to its present site at St Lucia. In 1961, the University College of Townsville enrolled its first students and in 1970 became the James Cook University of North Queensland. In 1975 the Griffith University opened in Brisbane.

Colleges of advanced education provide students with a wide range of non-tertiary, undergraduate, and post-graduate courses. Teacher training is undertaken at these colleges under the supervision of the Board of Teacher Education.

In 1977, technical education and adult education were integrated and the combined Technical and Further Education (TAFE) program offers training, including apprenticeship training, in trade, commercial, artistic, and domestic occupations. In addition, a large number of TAFE centres offer mainly recreational classes.

Health

Prior to 1900, preventive and curative services were carried out by local boards of health and local hospitals boards. Early health legislation was prompted either by the threat or existence of epidemic infectious disease.

The State Government bears prime responsibility for the administration of facilities for the maintenance of community health and prevention of disease. Free medical treatment for both in-patients and out-patients at public hospitals was introduced in 1945. Private hospitals, run mainly by religious authorities, supplement this service.

Most Queensland residents in isolated localities have access to the services of the Royal Flying Doctor Service which was established in 1928 at Cloncurry and now operates from three bases at Mount Isa, Charleville, and Cairns. In 1959 a Flying Surgeon Service was introduced to provide services to small hospitals within 640 kilometres of its base at Longreach. An Aerial Ambulance Service operates from Rockhampton.

The Health Department provides specialist services in many areas, including child guidance, maternal and child health, geriatric health, Aboriginal health, treatment of psychiatric patients, alcohol and drug dependence, and particular diseases.

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Chapter 4

GOVERNMENT

1 SYSTEM OF GOVERNMENT

Moreton Bay, the ‘Northern District of New South Wales’, was first used in 1824 as a penal settlement, and by 1843 had become a distinct electoral division. It was given a separate member of parliament in 1851, two in 1853, four in 1855, and nine in 1858. As electors of New South Wales, residents in what is now Queensland had enjoyed responsible government since *The New South Wales Constitution Act*, 1855, and when separation was effected by Letters Patent of 6 June 1859, an Order-in-Council of the same date gave Queensland a Constitution similar to that of New South Wales, and Sir George Bowen was appointed Governor of Queensland. On 10 December 1859 the Governor landed at Brisbane and proclaimed the separation of Queensland from New South Wales.

The Order-in-Council provided for a nominated Legislative Council of not less than five members appointed by the Governor of New South Wales for five years and such additional members as the Queensland Governor thought fit, to be appointed by him for life. In May 1860, 15 members were appointed, 11 for five years and 4 for life. There was also an elected Legislative Assembly consisting of 26 members returned by 16 electorates, the franchise including all adult males subject to a small property or tenancy qualification which excluded, according to the Registrar-General of the day, ‘only new arrivals not six months in the Colony, aliens, and a few hundreds of the most worthless, wandering, and improvident members of the community’.

Elections were held in April and May 1860. Executive government was in the hands of the Executive Council, and the first members were appointed by the Governor on 10 December 1859. The 1859 Order-in-Council was validated by *The Australian Colonies Act*, 1861, and with the passing of *The Constitution Act of 1867*, responsible government in Queensland was consolidated.

Since 1901, the former Colony of Queensland has been a State of the Commonwealth of Australia. The present system of government consists of the Governor, the Executive Council, and the Legislative Assembly, the Legislative Council having been abolished from 23 March 1922. The Executive Council is composed of the Governor and the Ministers in office. Local Government Authorities operate under legislation of the Queensland Parliament.

The Governor

His Excellency Commodore Sir James Maxwell Ramsay, K.C.M.G., K.C.V.O.,
C.B.E., D.S.C.

The present Governor of Queensland assumed office on 22 April 1977, and is the twentieth holder of the office since Queensland was separated from New South Wales. A complete list of Governors, with the date when each assumed office, is as follows:

Sir George Ferguson Bowen, G.C.M.G.	..	..	..	..	..	December 1859
Colonel Samuel Wensley Blackall	..	..	..	..	..	August 1868

Marquis of Normanby	August 1871
William Wellington Cairns, C.M.G.	January 1875
Sir Arthur Edward Kennedy, G.C.M.G., C.B.	July 1877
Sir Anthony Musgrave, G.C.M.G.	November 1883
Sir Henry Wylie Norman, G.C.B., G.C.M.G., C.I.E.	May 1889
Lord Lamington, G.C.M.G.	April 1896
Sir Herbert Charles Chermiside, G.C.M.G., C.B.	March 1902
Lord Chelmsford, K.C.M.G.	November 1905
Sir William MacGregor, G.C.M.G., C.B.	December 1909
Sir Hamilton John Goold-Adams, G.C.M.G., C.B.	March 1915
Sir Matthew Nathan, P.C.(Ire.), G.C.M.G.	December 1920
Sir John Goodwin, K.C.B., C.M.G., D.S.O.	June 1927
Sir Leslie Wilson, G.C.S.I., G.C.M.G., G.C.I.E., D.S.O.	June 1932
Sir John Lavarack, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O.	October 1946
Sir Henry Abel Smith, K.C.M.G., K.C.V.O., D.S.O.	March 1958
Sir Alan James Mansfield, K.C.M.G., K.C.V.O.	March 1966
Sir Colin Thomas Hannah, K.C.M.G., K.B.E., C.B.	March 1972
Commodore Sir James Maxwell Ramsay, K.C.M.G., K.C.V.O., C.B.E., D.S.C.	April 1977

The Queensland Ministry

(at 31 December 1983)

Premier and Treasurer—Hon. Johannes Bjelke-Petersen

Deputy Premier and Minister Assisting the Treasurer—Hon. William Angus Manson Gunn

Minister for Local Government, Main Roads and Racing—Hon. Russell James Hinze

Minister for Works and Housing—Hon. Claude Alfred Wharton

Minister for Mines and Energy—Hon. Ivan James Gibbs

Minister for Industry, Small Business and Technology—Hon. Michael John Ahern

Minister for Transport—Hon. Donald Frederick Lane

Minister for Lands, Forestry and Police—Hon. William Hamline Glasson

Minister for Health—Hon. Brian Douglas Austin

Minister for Education—Hon. Lionel William Powell

Minister for Water Resources and Maritime Services—Hon. John Philip Goleby

Minister for Primary Industries—Hon. Neil John Turner

Minister for Employment and Industrial Affairs—Hon. Vincent Patrick Lester

Minister for Environment, Valuation and Administrative Services—Hon. Martin James Tenni

Minister for Justice and Attorney-General—Hon. Neville John Harper

Minister for Welfare Services and Ethnic Affairs—Hon. Geoffrey Hugh Muntz

Minister for Tourism, National Parks, Sport and The Arts—Hon. Peter Richard McKechnie

Minister for Northern Development and Aboriginal and Island Affairs—Hon. Robert Carl Katter

Premiers of Queensland

When the Colony obtained its own representative government, the first Government was led by R. G. W. Herbert. A complete list of Premiers, with the date on which each entered office is as follows:

<i>Premier</i>	<i>Appointed</i>	<i>Premier</i>	<i>Appointed</i>	<i>Premier</i>	<i>Appointed</i>
R. G. W. Herbert	10-12-1859	B. D. Morehead	30-11-88	T. J. Ryan	1-6-15
A. Macalister	1-2-66	Sir Samuel Griffith	12-8-90	E. G. Theodore	22-10-19
R. G. W. Herbert	20-7-66	Sir Thomas Mcllwraith	27-3-93	W. N. Gillies	26-2-25
A. Macalister	7-8-66	H. M. Nelson	27-10-93	W. McCormack	22-10-25
R. R. Mackenzie	15-8-67	T. J. Byrnes	13-4-98	A. E. Moore	21-5-29
C. Lilley	25-11-68	J. R. Dickson	1-10-98	W. Forgan Smith	17-6-32
A. H. Palmer	3-5-70	A. Dawson	1-12-99	F. A. Cooper	16-9-42
A. Macalister	8-1-74	R. Philp	7-12-99	E. M. Hanlon	7-3-46
G. Thorn	5-6-76	A. Morgan	17-9-1903	V. C. Gair	17-1-52
J. Douglas	8-3-77	W. Kidston	19-1-06	G. F. R. Nicklin	12-8-57
T. Mcllwraith	21-1-79	R. Philp	19-11-07	J. C. A. Pizey	17-1-68
S. W. Griffith	13-11-83	W. Kidston	18-2-08	G. W. W. Chalk	1-8-68
Sir Thomas Mcllwraith	13-6-88	D. F. Denham	7-2-11	J. Bjelke-Petersen	8-8-68

2 THE QUEENSLAND PARLIAMENT

The Legislative Assembly is elected for a period of three years, each member representing a separate electoral district.

The *Electoral Districts Act 1971-1977* provides for a Legislative Assembly of 82 members. The Act divides the State into four electoral zones, namely (i) south-eastern (47 electoral districts); (ii) provincial cities (13 electoral districts); (iii) western and far-northern (7 electoral districts); and (iv) country (15 electoral districts).

Members' Salaries

Members were first paid in 1889 when the annual salary was \$600. From 10 October 1983 the basic salary was increased from \$37,700 to \$39,833 with additional salaries as follows: the Premier, \$42,794; the Deputy Premier, \$31,101; other Ministers, \$25,312; the Speaker, \$14,693; Chairman of Committees, \$4,785; Leader of the Opposition, \$16,455; Deputy Leader of the Opposition, \$3,641; and each Whip, \$2,451. Members also receive an electorate allowance ranging from \$9,550 to \$24,630, of which the Ministers and the Speaker receive 60 or 80 per cent according to location of electorate.

Members' Pensions

A scheme of pensions for members was introduced in 1949. The rate of contribution from 2 April 1970 has been 11½ per cent of the gross salary. There is a Treasury subsidy equal to sixty-five thirty-fifths of contributions. To qualify, an ex-member must have served, (a) for 11 years or more; or (b) for 8 years or more, and ceased to be a member, either as a result of defeat at an election, or by failure to receive endorsement for re-election, or did not seek re-election for reasons which satisfy the trustees. The rates of pension vary according to length and type of service, and range from 41½ per cent to 70 per cent of annual salary after 20 years of service. Pensions are increased at the rate of 3 per cent a year. A member leaving Parliament without qualifying for a pension receives a refund of all contributions, together with interest thereon.

Method of Voting

Property qualifications were abandoned in 1872 and adult male suffrage after six months' residence was established. In 1892 'contingent' or optional preferential voting was introduced. For the election of 1907 the franchise was widened to include women on the principle of 'one adult, one vote'. Legislation in 1914 provided for compulsory voting for the first time in Australia. Optional preferential voting continued until 1942 when members were elected on a relative majority vote ('first past the post'). Preferential voting was reintroduced in 1962 with the provision that a vote not clearly indicating the voter's order of preference for all candidates would be regarded as invalid. This brought Queensland's system generally into agreement with the procedure in other States and the Commonwealth. From 1 July 1973 the voting age was reduced from 21 years to 18 years. Voting at elections is by secret ballot.

An elector absent from his own electorate may vote at any polling-booth as an absent voter. Electors leaving the State prior to the polling-day at a general election may vote before leaving. At a by-election any person about to leave the electorate may vote before polling-day. Seriously ill, pregnant, or infirm electors may apply to a returning officer to vote before an official electoral visitor. The electoral visitor appointed for the district will take the votes of incapacitated people living in that district whether they are enrolled for it or another district. A postal vote may be applied for before polling-day by an elector who will be more than 8 kilometres from a polling-booth, or who, by reason of his membership of a religious order or his religious beliefs, will be precluded from attending on polling-day.

Electoral enrolment is compulsory for all persons 18 years of age and over who are British subjects by birth or naturalisation, and who have lived in Australia for six months and in an electoral district continuously for three months. Persons of unsound mind or who are incapable of managing their own affairs, and persons serving a sentence of one year or longer or attainted of treason, are not qualified to be enrolled as electors.

Voting at Elections

The names of the elected candidates and the number of persons qualified to vote at the 1983 State general election are shown in the next table. The representation of the various parties following the election was: National Party of Australia, 41; Liberal Party, 8; Australian Labor Party, 32; and independent, 1. Subsequently, two Liberal Party members changed to the National Party of Australia.

THE QUEENSLAND PARLIAMENT, ELECTION 22 OCTOBER 1983

Electoral district	Area of electorate in square kilometres	Number of persons qualified to vote	Member's name and political party
South-Eastern			
Albert	800	29,711	Gibbs, Hon. I. J. (<i>National</i>)
Archerfield	57	17,023	Hooper, K. J. (<i>A.L.P.</i>) (a)
Ashgrove	74	19,119	Veivers, T. R. (<i>A.L.P.</i>)
Aspley	33	19,735	Cahill, B. J. (<i>National</i>)
Brisbane Central	14	16,143	Davis, B. J. (<i>A.L.P.</i>)
Bulimba	12	15,722	McLean, R. T. (<i>A.L.P.</i>)
Caboolture	2,025	28,057	Newton, L. E. (<i>National</i>)
Chatsworth	25	18,944	Mackenroth, T. M. (<i>A.L.P.</i>)
Coorooora	2,250	26,193	Simpson, G. L. (<i>National</i>)
Everton	16	17,054	Milliner, G. R. (<i>A.L.P.</i>)
Fassifern	4,350	32,048	Lingard, K. R. (<i>National</i>)
Greenslopes	9	15,423	Harvey, L. T. (<i>National</i>)
Ipswich	22	17,738	Hamill, D. J. (<i>A.L.P.</i>)
Ipswich West	385	18,881	Underwood, D. F. (<i>A.L.P.</i>)
Ithaca	14	15,675	Miller, C. J. (<i>Liberal</i>)
Kurilpa	11	16,443	Warner, A. M. (<i>A.L.P.</i>)
Landsborough	800	30,630	Ahern, Hon. M. J. (<i>National</i>)
Lockyer	3,350	19,503	FitzGerald, A. A. (<i>National</i>)
Lytton	49	16,503	Burns, T. J. (<i>A.L.P.</i>)
Mansfield	74	20,655	Kaus, W. B. (<i>National</i>)
Merthyr	12	15,466	Lane, Hon. D. F. (<i>Liberal</i>) (b)
Mount Coot-tha	147	19,188	Lickiss, Hon. W. D. (<i>Liberal</i>)
Mount Gravatt	19	18,860	Henderson, I. T. (<i>National</i>)
Murrumba	133	21,746	Kruger, R. C. (<i>A.L.P.</i>)
Nudgee	70	15,749	Vaughan, K. H. (<i>A.L.P.</i>)
Nundah	25	15,990	Knox, Hon. Sir William (<i>Liberal</i>)
Pine Rivers	305	23,843	Chapman, Y. A. (<i>National</i>)
Redcliffe	200	17,337	White, T. A. (<i>Liberal</i>)
Redlands	505	28,963	Goley, Hon. J. P. (<i>National</i>)
Salisbury	69	21,844	Goss, W. K. (<i>A.L.P.</i>)
Sandgate	26	16,592	Warburton, N. G. (<i>A.L.P.</i>)
Sherwood	26	19,662	Innes, J. A. M. (<i>Liberal</i>)
Somerset	8,700	25,335	Gunn, Hon. W. A. M. (<i>National</i>)
South Brisbane	12	15,919	Fouras, D. (<i>A.L.P.</i>)
South Coast	530	27,109	Hinze, Hon. R. J. (<i>National</i>)

THE QUEENSLAND PARLIAMENT, ELECTION 22 OCTOBER 1983—continued

Electoral district	Area of electorate in square kilometres	Number of persons qualified to vote	Member's name and political party
<i>South-Eastern—continued</i>			
Southport	37	22,742	Jennings, D. B. (National)
Stafford	10	17,207	Murphy, D. J. (A.L.P.)
Surfers Paradise	56	24,396	Borbridge, R. E. (National)
Toowong	15	17,029	Bailey, E. W. (National)
Toowoomba North	38	17,829	McPhie, A. C. (National)
Toowoomba South	37	18,743	Warner, Hon. J. H. (National)
Wavell	10	15,430	Austin, Hon. B. D. (Liberal) (b)
Windsor	11	15,838	Comben, P. (A.L.P.)
Wolston	105	18,145	Gibbs, R. J. (A.L.P.)
Woodridge	1,425	25,365	D'Arcy, W. T. (A.L.P.)
Wynnum	54	18,174	Shaw, E. F. (A.L.P.)
Yeronga	13	16,250	Lee, Hon. N. E. (Liberal)
Total	27,000	941,951	
<i>Provincial Cities</i>			
Barron River	4,690	23,460	Tenni, Hon. M. J. (National)
Bundaberg	29	15,900	Campbell, C. B. (A.L.P.)
Cairns	480	20,961	DeLaey, K. E. (A.L.P.)
Isis	4,370	19,572	Powell, Hon. L. W. (National)
Mackay	60	20,727	Casey, E. D. (A.L.P.)
Maryborough	1,940	16,259	Alison, G. (National)
Mount Isa	134,215	15,287	Price, W. N. J. (A.L.P.)
Port Curtis	6,830	17,592	Prest, W. G. (A.L.P.)
Rockhampton	1,270	16,961	Wright, K. W. (A.L.P.)
Rockhampton North	95	20,846	Yewdale, L. J. (A.L.P.)
Townsville	4,090	25,530	McElligot, K. V. (A.L.P.)
Townsville South	103	15,492	Wilson, A. McL. (A.L.P.)
Townsville West	18	17,012	Smith, G. N. (A.L.P.)
Total	158,000	245,599	
<i>Western and Far-Northern</i>			
Balonne	73,300	8,540	Neal, D. McC. (National)
Cook	312,650	10,272	Scott, R. W. (A.L.P.)
Flinders	186,500	11,108	Katter, Hon. R. C. (National)
Gregory	506,700	8,306	Glasson, Hon. W. H. (National)
Peak Downs	40,400	13,906	Lester, Hon. V. P. (National)
Roma	57,150	8,708	Cooper, T. R. (National)
Warrego	145,900	8,262	Turner, Hon. N. J. (National)
Total	1,322,000	69,102	
<i>Country</i>			
Auburn	44,000	10,421	Harper, Hon. N. J. (National)
Barambah	7,950	11,613	Bjelke-Petersen, Hon. J. (National)
Burdekin	13,850	12,165	Stoneman, M. D. (National)
Burnett	16,650	14,256	Wharton, Hon. C. A. (National)
Callide	22,150	16,147	Hartwig, L. E. (Independent)
Carnarvon	10,200	10,871	McKechnie, Hon. P. R. (National)
Condamine	14,450	13,049	Littleproud, B. G. (National)
Cunningham	10,900	14,921	Elliott, J. A. (National)
Gympie	4,100	15,045	Stephan, L. W. (National)
Hinchinbrook	12,700	13,221	Row, E. C. (National)
Mirani	33,550	15,920	Randell, J. H. (National)
Mourilyan	11,650	11,454	Eaton, A. G. (A.L.P.)
Mulgrave	3,100	13,260	Menzel, M. R. (National)
Warwick	4,450	11,051	Booth, D. J. (National)
Whitsunday	10,550	18,160	Muntz, Hon. G. H. (National)
Total	220,000	201,554	
Total State	1,727,000	1,458,206	

(a) Deceased. At by-election on 19 May 1984 H. Palaszczuk (Australian Labor Party) elected.

(b) Later changed to National Party of Australia.

The voting in each electorate at the October 1983 State general election is shown in the next table.

VOTES RECORDED AT QUEENSLAND GENERAL ELECTION, 22 OCTOBER 1983

Electoral district	First preference votes recorded						Invalid votes recorded	Total votes recorded
	National Party of Australia	Liberal Party	Australian Labor Party	Australian Democrats	Other parties	Independent		
South-Eastern								
Albert	14,244	..	10,997	..	..	..	598	25,839
Archerfield	4,234	..	10,693	..	..	..	596	15,523
Ashgrove	4,929	3,425	7,383	1,676	..	..	171	17,584
Aspley	6,484	5,012	6,000	..	..	..	178	17,674
Brisbane Central .. ..	..	5,692	8,151	..	..	..	434	14,277
Bulimba	4,105	2,020	8,070	..	..	..	234	14,429
Caboolture	11,187	2,450	11,285	..	..	629	346	25,897
Chatsworth .. ..	..	7,234	9,867	..	..	..	417	17,518
Cooroorra	13,525	..	7,808	1,657	..	483	274	23,747
Everton	4,925	2,588	8,404	..	..	..	136	16,053
Fassifern	13,282	3,818	11,751	..	..	..	391	29,242
Greenslopes	4,353	3,921	5,704	..	..	..	186	14,164
Ipswich	3,812	3,478	8,916	..	..	148	168	16,522
Ipswich West	5,166	2,090	9,503	..	..	300	184	17,243
Ithaca .. ..	..	7,475	6,561	..	..	..	228	14,264
Kurilpa	3,193	3,600	7,080	..	270	198	316	14,657
Landsborough	15,309	1,353	(a) 8,656	..	296	1,654	368	27,636
Lockyer	11,030	2,875	3,998	..	..	..	165	18,068
Lytton .. ..	..	4,275	10,653	..	..	..	360	15,288
Mansfield	7,615	3,827	7,402	..	175	..	223	19,242
Merthyr	3,480	4,416	5,520	..	..	183	283	13,882
Mount Coot-tha	5,791	4,748	4,081	3,028	..	..	128	17,776
Mount Gravatt	5,909	5,209	6,201	..	..	..	239	17,558
Murrumba	6,008	3,795	10,169	..	..	..	266	20,238
Nudgee .. ..	..	5,398	8,973	..	..	..	330	14,701
Nundah .. ..	..	7,999	6,232	..	..	..	258	14,489
Pine Rivers	6,765	5,558	9,828	..	..	..	262	22,413
Redcliffe .. ..	..	8,533	6,948	..	..	..	441	15,922
Redlands	12,194	1,640	10,967	1,700	..	..	363	26,864
Salisbury	6,699	3,970	9,245	..	..	..	310	20,224
Sandgate	4,031	1,900	9,017	..	..	..	228	15,176
Sherwood	4,585	7,267	5,727	..	..	546	194	18,319
Somerset	12,473	1,972	8,536	..	..	..	323	23,304
South Brisbane	4,052	1,914	7,476	..	155	..	377	13,974
South Coast	11,326	3,019	8,971	..	..	..	314	23,630
Southport	10,406	3,024	6,543	..	..	..	376	20,349
Stafford	4,525	3,923	7,301	..	..	..	211	15,960
Surfers Paradise	11,976	2,843	6,211	..	..	..	342	21,372
Toowong	5,281	4,485	5,425	..	..	..	145	15,336
Toowoomba North	5,867	3,363	6,866	..	..	..	178	16,274
Toowoomba South	8,888	1,766	6,432	..	..	..	161	17,247
Wavell .. ..	..	7,208	6,848	..	..	..	239	14,295
Windsor	4,685	2,903	6,845	..	..	..	197	14,630
Wolston .. ..	..	5,697	10,246	..	..	..	566	16,509
Woodridge	7,648	2,133	11,131	1,616	(a) 253	..	345	23,126
Wynnum	5,469	1,887	9,267	..	..	..	279	16,902
Yeronga .. ..	..	7,788	6,930	..	..	..	343	15,061
Total	275,451	179,491	376,818	9,677	1,149	4,141	13,671	860,398

VOTES RECORDED AT QUEENSLAND GENERAL ELECTION, 22 OCTOBER 1983—*continued*

Electoral district	First preference votes recorded						Invalid votes recorded	Total votes recorded
	National Party of Australia	Liberal Party	Australian Labor Party	Australian Democrats	Other parties	Independent		
Provincial Cities								
Barron River	10,966	..	9,642	..	..	..	369	20,977
Bundaberg	6,122	..	7,676	956	..	..	137	14,891
Cairns	7,680	1,358	9,250	..	..	..	389	18,677
Isis	10,174	..	7,654	..	..	..	234	18,062
Mackay	8,064	..	10,239	..	..	..	284	18,587
Maryborough	6,769	1,177	7,342	..	..	..	118	15,406
Mount Isa	5,879	..	6,607	..	..	337	328	13,151
Port Curtis	6,973	..	8,127	..	(a) 844	..	204	16,148
Rockhampton	3,883	2,657	8,900	..	..	131	155	15,726
Rockhampton North	6,427	1,502	11,261	..	..	..	184	19,374
Townsville	6,298	4,124	10,725	..	..	1,365	215	22,727
Townsville South ..	5,201	967	7,677	..	..	..	160	14,005
Townsville West ..	4,631	1,819	7,502	..	698	..	191	14,841
Total	89,067	13,604	112,602	956	1,542	1,833	2,968	222,572
Western and Far-Northern								
Balonne	5,722	..	1,973	..	..	..	95	7,790
Cook	(a) 3,088	..	5,373	..	..	..	170	8,631
Flinders	5,109	..	4,085	..	..	669	103	9,966
Gregory	4,689	..	2,772	..	..	..	70	7,531
Peak Downs	7,060	..	4,682	..	..	146	78	11,966
Roma	4,266	996	2,365	293	..	..	52	7,972
Warrego	4,348	..	3,195	..	..	..	68	7,611
Total	34,282	996	24,445	293	..	815	636	61,467
Country								
Auburn	7,114	..	2,587	..	..	..	82	9,783
Barambah	8,446	..	2,310	..	..	..	122	10,878
Burdekin	5,263	1,329	4,523	..	..	108	128	11,351
Burnett	8,710	..	4,461	..	..	..	123	13,294
Callide	5,817	..	3,746	..	..	5,249	134	14,946
Carnarvon	6,327	..	3,535	..	..	..	162	10,024
Condamine	8,268	..	2,468	..	..	1,346	78	12,160
Cunningham	10,830	..	2,922	..	..	..	173	13,925
Gympie	8,962	..	4,940	..	..	..	158	14,060
Hinchinbrook	5,706	1,456	4,951	..	..	..	167	12,280
Mirani	8,234	..	6,325	..	..	..	175	14,734
Mourilyan	4,941	..	5,510	..	..	135	104	10,690
Mulgrave	6,769	..	4,970	..	..	320	132	12,191
Warwick	6,829	..	3,242	..	..	..	167	10,238
Whitsunday	8,946	..	6,911	..	..	..	226	16,083
Total	111,162	2,785	63,401	..	..	7,158	2,131	186,637
Total State ..	509,962	196,876	577,266	10,926	2,691	13,947	19,406	1,331,074

(a) Two candidates.

Officials in Parliament

Offices in the First Session of the Forty-fourth Parliament were held by the following members:

Speaker—Hon. J. H. Warner

Chairman of Committees—E. C. Row

Temporary Chairmen of Committees—D. J. Booth, J. H. Randell, M. R. Menzel, D. Fouras, B. J. Davis

Leader of the Opposition—K. W. Wright

Whips: Government—D. McC. Neal; *Opposition*—T. J. Burns

Ombudsman (State)

The *Parliamentary Commissioner Act* 1974 established an Office of Parliamentary Commissioner for Administrative Investigations. The Commissioner is an Officer of Parliament whose duty is to investigate grievances of the public about actions by State Government Departments and Authorities and their officers. The Office was opened on 8 October 1974.

The Authorities include Local Authorities (i.e. City, Town, and Shire Councils), universities, colleges of advanced education, harbour boards, and electricity boards.

If the Commissioner finds that an action was wrong, he may make recommendations to the Department or Authority and if no appropriate action is taken he may report to the Premier and then to Parliament.

Ombudsman (Commonwealth)

In June 1979 a Commonwealth Ombudsman was appointed to Queensland to investigate complaints against Commonwealth Government Departments and Authorities.

3 STATE GOVERNMENTS

All six States in Australia have the parliamentary system of executive government, and the names of the Premiers of the States and the dates of the last elections prior to 31 December 1983 are shown hereunder.

State	Premier	Last election
New South Wales ..	Hon. N. K. Wran (<i>Australian Labor</i>) ..	September 1981
Victoria ..	Hon. J. Cain (<i>Australian Labor</i>) ..	April 1982
Queensland ..	Hon. J. Bjelke-Petersen (<i>National</i>) ..	October 1983
Western Australia ..	Hon. B. T. Burke (<i>Australian Labor</i>) ..	February 1983
South Australia ..	Hon. J. C. Bannon (<i>Australian Labor</i>) ..	November 1982
Tasmania ..	Hon. R. T. Gray (<i>Liberal</i>) ..	May 1982

The Assemblies (Lower Houses) of New South Wales, Victoria, Queensland, South Australia, and Western Australia are elected for a term of three years. That of Tasmania is elected for a term of four years. Franchise for all persons aged 18 years and over and compulsory voting are common to all State Lower House elections.

All States except Queensland have an Upper House or Legislative Council. Members are elected on rotational schemes for longer terms than in the Lower Houses.

4 THE COMMONWEALTH GOVERNMENT

Queensland was one of the six States which formed the Commonwealth of Australia in 1901, and was entitled to elect 6 of the 36 members of the Senate. Legislation in 1948 provided for an increase in the number of Senators for each State to 10 and the *Senate (Representation of Territories) Act* 1973 provided for 2 Senators for each of the Territories. The number of members of the House of Representatives for each State is in proportion to population, with a minimum of 5 (which applies in Tasmania). At the March 1983 election the number of members for each of the States was as follows: New South Wales, 43; Victoria, 33; Queensland, 19; Western

Australia, 11; South Australia, 11; Tasmania, 5; Australian Capital Territory, 2; and Northern Territory, 1.

Members of both Houses are elected by all persons aged 18 years and over (extended from 21 years from 21 March 1973). Enrolment is not compulsory for Aboriginal natives of Australia. Half of the Senators for each State are elected every three years for a six-year term by the whole State voting as one electorate. Members of the House of Representatives are elected to represent single-member electorates for three years. Voting is compulsory.

The Executive powers in the Commonwealth of Australia are vested in the Governor-General in Council. The Executive Council consists of all Ministers of State, and Ministers on leaving office technically remain members of the Executive Council, but actually no longer attend its meetings. Thus the Executive consists in fact of the Governor-General advised by Ministers.

The Governor-General

His Excellency the Right Honourable Sir Ninian Martin Stephen, A.K., G.C.M.G., G.C.V.O., K.B.E., K.St.J.

(From 29 July 1982)

The Commonwealth Government Ministry

(At 31 December 1983)

Cabinet Ministers

Prime Minister—Hon. R. J. L. Hawke (V.)

Trade, Assisting the Prime Minister for Commonwealth–State Relations, Vice-President of the Executive Council, and Deputy Prime Minister—Hon. L. F. Bowen (N.S.W.)

Industry and Commerce and Assisting the Minister for Communications—Senator Hon. J. N. Button (V.)

Social Security—Senator Hon. D. J. Grimes (T.)

Employment and Industrial Relations and Assisting the Prime Minister for Public Service Industrial Matters—Hon. R. Willis (V.)

Treasurer—Hon. P. J. Keating (N.S.W.)

Immigration and Ethnic Affairs—Hon. S. J. West (N.S.W.)

Resources and Energy—Senator Hon. P. A. Walsh (W.A.)

Foreign Affairs—Hon. W. G. Hayden (Q.)

Education and Youth Affairs and Assisting the Prime Minister for the Status of Women—Senator Hon. S. M. Ryan (A.C.T.)

Attorney-General—Senator Hon. G. J. Evans (V.)

Defence—Hon. G. G. D. Scholes (V.)

Finance and Assisting the Prime Minister for Public Service Matters—Hon. J. S. Dawkins (W.A.)

Other Ministers

Transport—Hon. P. F. Morris (N.S.W.)

Primary Industry—Hon. J. C. Kerin (N.S.W.)

Aviation, Special Minister of State and Assisting the Minister for Defence—Hon. K. C. Beazley (W.A.)

Housing and Construction and Assisting the Treasurer—Hon. C. J. Hurford (S.A.)

Sport, Recreation and Tourism, Administrative Services and Assisting the Minister for Industry and Commerce—Hon. J. J. Brown (N.S.W.)

Other Ministers—continued*Health*—Hon. N. Blewett (S.A.)*Science and Technology*—Hon. B. O. Jones (V.)*Communications*—Hon. M. J. Duffy (V.)*Home Affairs and Environment*—Hon. B. Cohen (N.S.W.)*Aboriginal Affairs*—Hon. A. C. Holding (V.)*Veterans' Affairs*—Senator Hon. A. T. Gietzelt (N.S.W.)*Territories and Local Government and Assisting the Prime Minister for Community Development and Regional Affairs*—Hon. T. Uren (N.S.W.)*Defence Support*—Hon. B. L. Howe (V.)**Queensland Members****The Senate (Queensland Representation)**Bjelke-Petersen, F. I. (*National*) (a)Boswell, R. L. D. (*National*) (b)Collard, S. J. (*National*) (a)Colston, M. A. (*Australian Labor*) (a)Georges, G. (*Australian Labor*) (a)Jones, G. N. (*Australian Labor*) (b)MacGibbon, D. J. (*Liberal*) (b)Macklin, M. J. (*Australian Democrats*) (b)Martin, K. J. (*Liberal*) (a)Reynolds, M. (*Australian Labor*) (b)

(a) Term—To 30 June 1988.

(b) Term—To 30 June 1985.

House of Representatives

The names of the elected Queensland members of the House of Representatives and the number of persons qualified to vote in each electorate at the 1983 general election are shown in the next table.

HOUSE OF REPRESENTATIVES ELECTION, QUEENSLAND, 5 MARCH 1983

Electoral division	Area of electorate in square kilometres	Number of persons qualified to vote	Member's name and political party
Bowman	600	82,242	Keogh, L. J. (<i>A.L.P.</i>)
Brisbane	50	69,067	Cross, M. D. (<i>A.L.P.</i>)
Capricornia	25,000	72,538	Everingham, Hon. D. N. (<i>A.L.P.</i>)
Darling Downs	8,350	74,468	McVeigh, Hon. D. T. (<i>National</i>)
Dawson	67,850	77,757	Braithwaite, R. A. (<i>National</i>)
Fadden	4,320	100,856	Beddall, D. P. (<i>A.L.P.</i>)
Fisher	7,150	100,109	Adermann, Hon. A. E. (<i>National</i>)
Griffith	260	64,500	Humphreys, B. C. (<i>A.L.P.</i>)
Herbert	8,400	78,481	Lindsay, E. J. (<i>A.L.P.</i>)
Kennedy	663,150	64,728	Katter, Hon. R. C. (<i>National</i>)
Leichhardt	406,650	74,964	Gayler, J. (<i>A.L.P.</i>)
Lilley	125	66,459	Darling, E. E. (<i>A.L.P.</i>)
McPherson	1,500	95,553	White, P. N. D. (<i>Liberal</i>)
Maranoa	517,400	68,011	Cameron, I. M. D. (<i>National</i>)
Moreton	60	69,566	Killen, Hon. Sir James (<i>Liberal</i>) (a)
Oxley	2,575	80,772	Hayden, Hon. W. G. (<i>A.L.P.</i>)
Petrie	140	77,057	Wells, D. McM. (<i>A.L.P.</i>)
Ryan	270	77,864	Moore, Hon. J. C. (<i>Liberal</i>)
Wide Bay	14,150	77,869	Millar, P. C. (<i>National</i>)
Total for State	1,727,000	1,472,861	

(a) Resigned. At by-election on 5 November 1983 D. M. Cameron (*Liberal*) elected.

Final figures for first preference votes cast in each electoral division at the 5 March 1983 House of Representatives election are shown in the next table.

Final figures for first preference votes cast in Queensland at the 1983 Senate election were distributed as follows: Australian Labor Party, 493,424; National Party of Australia, 363,462; Liberal Party, 187,495; Australian Democrats, 98,997; other, 103,943. The number of invalid votes was 116,858.

VOTES RECORDED AT HOUSE OF REPRESENTATIVES ELECTION, QUEENSLAND, 5 MARCH 1983

Electoral division	First preference votes recorded						Invalid votes recorded	Total votes recorded
	National Party of Australia	Liberal Party	Australian Labor Party	Australian Democrats	Other parties	Independent		
Bowman	4,579	30,522	37,666	3,040	..	..	945	76,752
Brisbane	5,447	20,566	31,596	3,462	1,565	..	864	63,500
Capricornia ..	(a) 17,100	11,465	36,662	1,881	226	..	754	68,088
Darling Downs ..	42,627	..	22,524	3,960	..	..	715	69,826
Dawson	35,686	..	34,229	..	420	(a) 849	815	71,999
Fadden	7,251	35,692	44,412	3,806	(a) 781	..	1,476	93,418
Fisher	36,848	13,414	35,220	6,764	..	..	960	93,206
Griffith .. ..	..	18,545	32,597	3,777	(a) 1,370	..	1,301	57,590
Herbert	9,562	23,875	35,368	1,597	..	..	659	71,061
Kennedy	32,871	..	22,407	2,757	..	..	748	58,783
Leichhardt ..	32,285	..	35,071	..	..	..	1,251	68,607
Lilley .. ..	..	24,249	35,350	1,779	375	..	687	62,440
McPherson ..	20,328	31,118	29,265	4,254	1,687	..	1,277	87,929
Maranoa	39,591	..	19,057	4,300	..	..	723	63,671
Moreton .. ..	..	29,638	28,854	4,230	712	..	987	64,421
Oxley .. ..	..	20,346	49,837	3,699	668	..	956	75,506
Petrie .. ..	..	31,227	33,283	4,506	411	1,453	1,003	71,883
Ryan .. ..	..	37,873	25,386	5,975	..	(a) 2,099	862	72,195
Wide Bay ..	35,472	..	32,362	2,850	1,813	..	806	73,303
Total	319,647	328,530	621,146	62,637	10,028	4,401	17,789	1,364,178

(a) Two candidates.

5 STATE ADMINISTRATIVE ARRANGEMENTS

The administrative arrangements of the State Government are outlined in the following list of ministerial portfolios and the particular departments and sub-departments which the relevant cabinet minister controls:

Premier and Treasurer

Agent-General's Office, London
Auditor-General's Department
Chief Office, Premier's Department
Co-ordinator-General's Department
Inter-Governmental Relations Division
Ministerial Parking Station
Parliamentary Counsel's Office

Public Accountants' Registration Board
Public Service Board
Queensland Government Liaison Office, North Queensland
Queensland Government Representative Office, Tokyo
State Public Relations Bureau
State Service Superannuation Board

Deputy Premier and Minister Assisting the Treasurer

Chief Office, Treasury
Corporation of the Nominal Defendant
Golden Casket Office
Land Tax Office
Local Government Grants Commission

Office of Insurance Commissioner
Stamp Duties Office
State Actuary's Office
State Government Computer Centre
State Government Insurance Office

Minister for Local Government, Main Roads and Racing

Local Government Department
Main Roads Department

Picture Theatre and Films Commission
Racing and Betting

Minister for Works and Housing

Board of Architects
 Board of Professional Engineers
 Builders' Registration Board
 Chief Office and Branches, Department of Works

House Builders' Registration Board
 Public Buildings, Services
 Queensland Housing Commission

Minister for Mines and Energy

Chief Gas Examiner and Government Gas Engineer's Office
 Chief Office, Department of Mines
 Coal Miners' Pensions Tribunal
 Electrical Workers and Contractors Board
 Geological Survey of Queensland
 Government Assay Office, Cloncurry
 Inspectors of Mines Offices
 Mines Rescue Stations

Mining Wardens' Offices
 Queensland Coal Board
 Queensland Energy Resources Advisory Council
 Queensland Government Mining Journal
 State Batteries
 State Coke Works, Bowen
 State Electricity Commission

Minister for Industry, Small Business and Technology

Department of Commercial and Industrial Development

Small Business Development Corporation

Minister for Transport

Department of Transport
 Metropolitan Transit Authority

Queensland Road Safety Council
 Railway Department

Minister for Lands, Forestry and Police

Chief Office, Department of Lands
 District Land Offices
 Forestry Department
 Police Complaints Tribunal

Police Department
 Rabbit Control Authority
 State Emergency Service
 Stock Routes Co-ordinating Board

Minister for Health

Aboriginal Health
 Alcohol and Drug Dependence Services
 Ambulance Services
 Board of Nursing Studies
 Chief Office, Department of Health
 Division of Child Health
 Division of Community Medicine
 Division of Dental Services
 Division of Environmental and Occupational Health
 Division of Geriatrics
 Division of Health and Medical Physics
 Division of Health Promotion
 Division of Psychiatric Services
 Division of School Health Services
 Division of Tuberculosis

Division of Youth Welfare and Guidance
 Eventide Homes
 Flying Surgeon
 Government Chemical Laboratory
 Hospitals Boards
 Institute of Forensic Pathology
 Laboratory of Microbiology and Pathology
 Medical and Other Professional Registration Boards
 Nursing Services
 Queensland Institute of Medical Research
 Queensland Radium Institute
 Rockville Training Centre
 Training Centres for Intellectually Handicapped (State controlled)
 Wacol Rehabilitation Clinic

Minister for Education

Australian Music Examinations Board
 Board of Adult Education
 Board of Advanced Education
 Board of Secondary School Studies
 Board of Teacher Education
 Chief Office, Department of Education
 Griffith University

Institutes of Advanced Education
 James Cook University of North Queensland
 Pre-schools
 Queensland Conservatorium of Music
 State Schools
 Technical and Further Education
 University of Queensland

Minister for Water Resources and Maritime Services

Beach Protection Authority
 Brisbane and Area Water Board
 Department of Harbours and Marine
 Gold Coast Waterways Authority
 Marine Board

Port of Brisbane Authority
 Queensland Boating and Fisheries Patrol
 Queensland Water Resources Commission
 Water Quality Council
 Water Supply, Planning, Design, Construction

Minister for Primary Industries

Agricultural Bank
 Central Sugar Cane Prices Board
 Division of Animal Industry
 Division of Dairying
 Division of Land Utilisation

Division of Marketing
 Division of Plant Industry
 Primary Industries Department
 Queensland Fisheries Service
 Rural Reconstruction Board

Minister for Employment and Industrial Affairs

Apprenticeships	Industrial Registrar's Office
Commissioner of Prices	Industry and Commerce Training Commission
Consumer Affairs Bureau	Inspectors of Workers' Accommodation
Department of Employment and Industrial Affairs	Machinery, Scaffolding, Weights and Measures, Occupational Safety Branches
Factories and Shops Branch	Publication of Industrial Gazette
Government Statistician	Workers' Compensation Board of Queensland
Industrial Inspectors	

Minister for Environment, Valuation and Administrative Services

Department of Mapping and Surveying and Office of the Surveyor-General	Queensland Place Names Board
Division of Air Pollution Control	Rural Fires Board
Division of Noise Abatement	State Fire Services Council
Fire Brigades	State Stores Board
Government Advertising Office	Surveyors Board of Queensland
Government Motor Garage	Valuer-General's Department
Government Printing Office	Valuers Registration Board

Minister for Justice and Attorney-General

Building Societies Registrar	Public Trustee
Chief Office, Department of Justice	Public Defender's Office
Court Reporting Bureau	Registrar-General's Office
Friendly Societies Registrar	Small Claims Tribunal
Law Reform Commission	Solicitor-General and Staff, including Crown Solicitor
Legal Aid Commission	State Electoral Office
Licensing Commission	Supreme, Circuit, District, and Magistrates Courts
Office of the Commissioner for Corporate Affairs	Titles Office

Minister for Welfare Services and Ethnic Affairs

Chief Office, Department of Welfare Services	Industrial Institution for the Blind
Children's Court	National Fitness Council
Children's Services Department, incl. Wilson Youth Hospital, Westbrook Training Centre, Birralee (Rockhampton), Carramar (Townsville), Warilda (Woolloowin)	Parole Board
Division of Social Work	Prisons Department
Division of Youth Affairs	Probation and Parole Service
	Relief Assistance Branch
	State Migration Office

Minister for Tourism, National Parks, Sport and The Arts

Department of The Arts, National Parks and Sport	Queensland Film Corporation
Directorate of Cultural Activities	Queensland Government Tourist Bureau
Films Review Board	Queensland Museum
Library Board of Queensland	Queensland Performing Arts Trust
Literature Review Board	Queensland Theatre Company
National Parks and Wildlife Service	Queensland Tourist and Travel Corporation
Queensland Art Gallery	State Library
Queensland Cultural Centre Trust	

Minister for Northern Development and Aboriginal and Island Affairs

Department of Aboriginal and Islanders Advancement	Northern Development
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6 RAILWAY DEPARTMENT

This section continues the series commenced in 1973, which includes in each edition of the *Year Book* a brief outline of the history, development, and main functions of a selected State Government Department or Statutory Authority. Further details of the functions of the Queensland Railways are shown in Chapter 14, Transport and Communication.

When the colony of Queensland achieved self-government in 1859, one of the major problems to be overcome concerned the need to establish an efficient transport system.

At that time, the non-indigenous population of Queensland totalled about 25,000 men, women, and children, who occupied an area of almost 1.74m square kilometres. Roads, where these existed, were merely ill-defined tracks which, almost invariably, became impassable in wet weather. Conditions for travel were such that writers of that time described journeys away from the coastal areas as 'a species of martyrdom'.

Transport was only one of the pressing matters to be considered when the first State Parliament opened on 22 May 1860. Communications, roads, a postal and telegraph service, schools, a judicial system, and health affairs all required urgent attention. At the same time, it became evident that a rail system of some form was essential to the development of the State, and following a visit to England by the Premier, a Railway Bill was placed before Parliament on 19 May 1863. This document drew attention to the inadequacy of the road system, despite a substantial expenditure of funds, and to the fact that construction of a railway was proceeding in New South Wales and was expected to reach the border soon.

The bulk of the flow of traffic in Queensland indicated that the logical point to commence a railway was in the southern and western portions of the State, and on the recommendation of Mr Abram Fitzgibbon, who was later to become Queensland's first Commissioner for Railways, a 1,067 millimetre gauge railway was proposed for that part of the State.

The matter of rail gauge was hotly debated and in fact led to a dissolution of Parliament when the House was equally divided. The railway question was a principal focus of the ensuing election, which saw the Government returned with an increased majority. When the Railway Bill was resubmitted to Parliament, a Committee of the Legislative Council examined several leading engineers, contractors, and surveyors on the matter of rail gauge. Although Mr Fitzgibbon, who appeared before this Committee, was strongly opposed by other witnesses, including the Surveyor-General, his evidence carried the day. He concluded his submission by stating that 'if 3 feet 6 inches [1,067 millimetres] is accepted as a standard gauge, it will answer all the purposes of Queensland for one hundred years'.

Subsequent events have shown that, notwithstanding operational difficulties at change-of-gauge locations, Mr Fitzgibbon's contention has been vindicated. Queensland Railways, when compared with other State Government systems, has the greatest route length of track, operates the largest trains, and hauls the greatest volume of goods annually.

One of the principal reasons for Mr Fitzgibbon's recommendation of a 1,067 millimetre gauge railway was the much lower construction cost. He also commented adversely on maintenance costs applicable to standard gauge systems he had inspected in England, where speeds of 80 to 100 km/h created enormous rail wear problems. The aspect of speed is, in fact, the only one where Queensland does not compare favourably with trains operating in other Australian States, but to a great extent, this is due to factors other than gauge.

Given the somewhat less than buoyant state of the colony's finances at the time of construction, and the difficulty in those days of undertaking large earth-moving contracts, track alignment generally followed the easiest route rather than the optimum. Regrettably, this factor remains today in many areas as an inhibiting influence on high speed operations.

The first section of railway completed was from Ipswich to Bigge's Camp (now Grandchester). Construction commenced on 25 February 1864, and although this project was not commissioned until 31 July 1865, the project was sufficiently advanced on 25 April of that year for the first railway excursion to operate over portion of the section.

There was considerable construction activity during the few years immediately following the opening of the first section, with the railway being progressively opened to Gatton and Helidon in 1866, and to Toowoomba and Jondaryan the following year. The next year, 1867, saw rail established in central Queensland, with the opening of track between Rockhampton and Westwood on 17 September.

Construction was in full swing on several fronts during the period to the end of the nineteenth century, by which time 4,445 kilometres of railway were operating, providing services to centres as widely separated as Cunnamulla and Winton in the west and Normanton and Cooktown in the north. This was a major achievement, considering that the first section of a little over 32 kilometres had been opened only 35 years previously.

The network now extends over 10,000 kilometres of track, has a workforce in excess of 25,000, and, in 1982, carried almost 44m tonnes of goods.

The four locomotives of the initial fleet were imported from England. They were wood-burning A10 Class 0-4-2s, weighing 22 tonnes, and on a 1 in 50 grade were capable of hauling a load of 71 tonnes. The largest trains currently operated are worked by six Locotrol-operated, diesel-electric locomotives hauling a gross trainload of 10,500 tonnes.

Many classes of steam locomotives were subsequently designed and constructed locally, by private contractors as well as in the Railway Workshops at Ipswich. They gave sterling service until the last steam locomotive (apart from special historical excursions) worked a train at Mackay on 21 December 1969.

At no time was the capacity of men and machines taxed more heavily than during the World War II years, particularly during 1942-43, when traffic handled showed a 250 per cent increase over that of three years previously. In addition to train operations, Departmental facilities in many areas were turned to the war effort, e.g. the Ipswich Workshops, designed for the manufacture and repair of locomotives and rolling stock, turned out a vast quantity of war equipment, including machine tools, gun barrels, and marine and aircraft engines. This workload was superimposed on a very heavy maintenance program to keep all available rolling stock operational during this trying time.

At the end of the war in 1945, the Department was confronted with the massive task of repairing and upgrading a fleet of locomotives and rolling stock, as well as track structure, which had been stressed to a point almost beyond recovery. At the same time, it had to withstand strong competition from other forms of transport.

One of the major initiatives taken was in regard to motive power, and, in 1951, orders were placed for diesel electric locomotives. The first of these units went into service in 1952, establishing a locomotive concept which, with the exception of suburban passenger services, is used almost exclusively at the present time.

Nowhere were the advantages of diesel-electric traction more evident than in the heavy bulk haulage of coal which began in earnest with the development of the Kiangra (and subsequently Moura) coking coal export trade in 1959. The initial trains of 35 four-wheeled hopper wagons, each carrying approximately 11 tonnes of coal, were hauled by BB18½ class steam locomotives, and travelled to Gladstone via Mount Morgan and Rockhampton. The next development in this traffic was the use of the largest steam locomotive ever in service in Queensland, the Beyer-Garratt. These units weighed 139 tonnes, had a tractive effort of 14,061 kilograms, and hauled a train of 46 hopper wagons for a pay-load of about 508 tonnes of coal. Diesel power was first used on this coal haul in 1964, and resulted in the standard train being expanded to 61 hopper wagons, carrying 680 tonnes of coal. It was not until the delivery later that year of the first high capacity bulk coal wagons, however, that the coal haul moved out of its formative stages. Double-headed diesels were soon introduced into this traffic, and on 21 December 1967, the first triple-header, diesel-electric train to operate in Australia ran from Moura through Mount Morgan to Gladstone. This train was comprised of 51 VO class wagons and had a pay-load of 2,200 tonnes of coal. The 'pony railway' of 1865 had come of age in the field of heavy transport.

Diesel-electrics are considerably kinder to track than are steam locomotives, but the heavy repetitive loadings imposed by increasing coal traffic called for higher track standards than had previously been required. A greater depth of crushed stone ballast was placed under heavier-section, timber sleepers which were fitted with steel plates to improve track stability. Rail size was increased to 47 kg/metre and welded into 61 metre lengths. At the same time gradients were reduced in the loaded direction and track alignment on new sections was improved by specifying a minimum 300 metre radius on curves.

There has been constant improvement and development since that time to the present standard on heavy haulage lines of 60 kg/metre rail, continuously welded, and laid on concrete sleepers.

A major breakthrough in heavy haul operations came with the development of remote radio control of a group of unmanned slave locomotives from manned units at the head of a train. The American Locotrol system is used extensively in Queensland and has proved to be most successful. The largest trains operated by this method run from Bowen Basin mines to Hay Point and are composed of six locomotives and 148 wagons. The trains are 2 kilometres long and have a gross mass of 10,500 tonnes. They are worked by a single crew on the leading set of three locomotives, from which power and brake settings are transmitted by radio signals to the remote control of three locomotives in the middle of the train, on which the control settings are reproduced. See photograph facing page 225.

Effective utilisation of a rail system is dependent upon maximising track capacity to meet traffic demands, and this vital aspect is catered for by the extensive use of Centralised Traffic Control, which permits the control of operations over a considerable area from a central point, including the setting of points and signals. This and other modern safe working systems depend on efficient communications and great advances in this field have been, and are continuing to be, made. End to end communication by radio on trains, the use of portable radios in shunting and marshalling areas, and the imminent introduction of a microwave system in north Queensland, are examples of the use of modern technology in this facet of operations.

Although Queensland Railways is principally a freight carrier, the system operates passenger services with well-appointed, air-conditioned trains between Brisbane and Cairns and to western centres at Cunnamulla/Quilpie, Winton, and Mount Isa. In the Brisbane suburban area, commuters are able to travel on electric multiple unit trains which, for comfort and performance, are the equal of any in the world. The area of their operations is presently bounded by Ipswich, Ferny Grove, Petrie, Shorncliffe, Thorneside, and Kingston, but work is currently proceeding on extensions to Beenleigh and Caboolture.

The Department Today

The Railway Department administers the *Railways Act* 1914–1982. The Commissioner, representing the Crown, is a corporation solely capable in law of suing and being sued and with powers to purchase, sell, and own land and other properties.

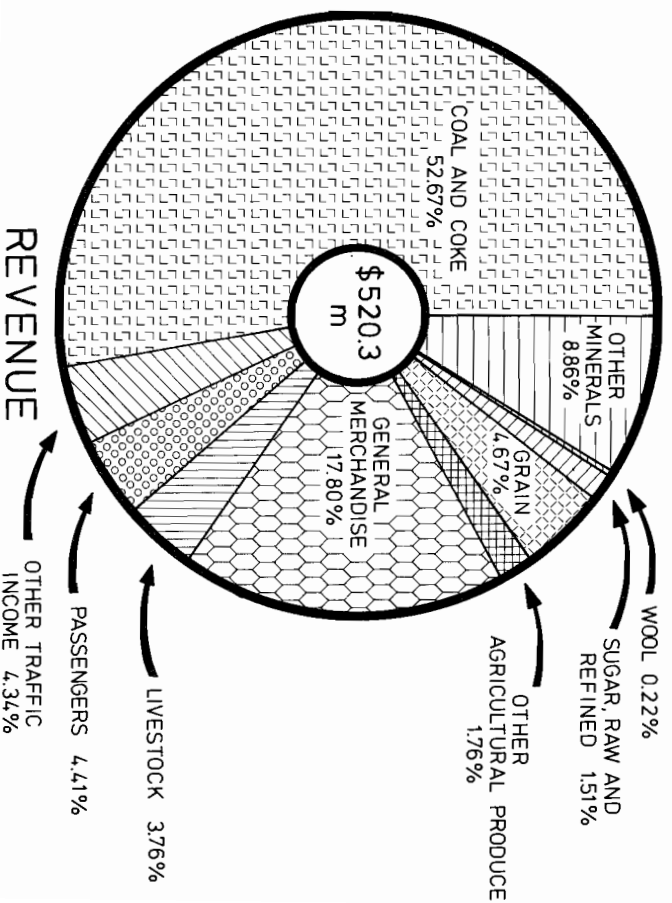
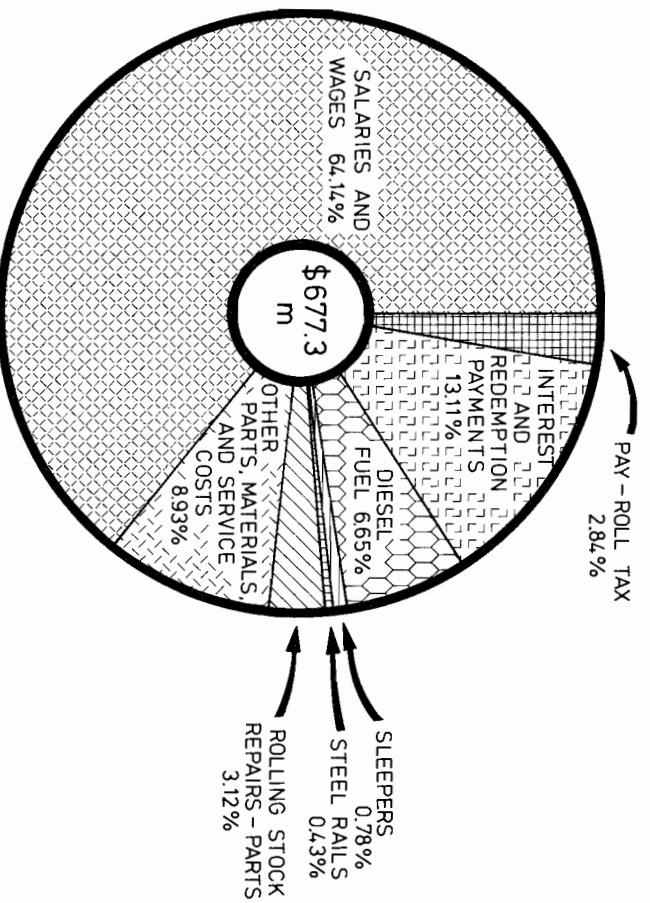
The administration is decentralised with a head office located in Brisbane, as is the headquarters of the General Manager, South Eastern Division. Other Divisional headquarters are located in Toowoomba (South Western), Rockhampton (Central), and Townsville (Northern).

For operational efficiency, divisional administration is further decentralised into districts which have headquarters in Brisbane, Roma, Maryborough, Gladstone, Rockhampton, Mackay, Emerald, Townsville, Cairns, and Hughenden.

The prime function of the Department is to provide for the transport of passengers, livestock, and goods in Queensland on a primarily commercial basis, but recognising that, in some instances, there are over-riding social and public welfare considerations.

In 1982–83 Queensland Railways consisted of 9,979 kilometres of railway open to traffic. It carried 1,614,391 passengers on country services and 33,135,069 on suburban services. The total freight tonnage carried was 43.7m tonnes and the goods train kilometres run were 22,285,230. To perform this task, the Department has some 604 locomotives, 1,267 passenger cars, 24,685 goods wagons, and a work force of almost 26,000 employees. The operational functions are supported by civil, mechanical, electrical, signalling, and communication engineering forces, together with the accounting, marketing, personnel, and data processing groups, so necessary for modern business operations.

QUEENSLAND RAILWAYS OPERATIONS, 1981-82



Engineering Departments

The civil engineering functions of the Railway Department are both extensive and complex. This sector of the organisation has the responsibility for the design, construction, and maintenance of the permanent way and track with the associated bridges (both rail and road), stations, platforms, loading facilities, buildings, and housing (both permanent and temporary) as well as stock yards and such diverse functions as water supplies, drainage, and sewerage. In fact there is scarcely a facet of civil engineering design and construction in which the Railway Department has not been involved at one time or another.

Mechanical engineering represents the other major technical aspect of the functions of the Queensland Railways, being responsible for the design, construction, and maintenance of all the rolling stock. The mechanical engineering function has witnessed the transition, through time, from small steam locomotives with draw hook and link coupling to large steam locomotives, diesel-hydraulic locomotives, and diesel-electric locomotives and has now become involved in the initial designs for the mainline all-electric locomotives.

Major workshops at Ipswich, Redbank, Rockhampton, and Townsville carry out maintenance and overhaul of locomotives, carriages, wagons, and other track vehicles, while depots at Roma, Toowoomba, Maryborough, Gladstone, Mackay, Callemondah, Jilalan, and Cairns service locomotives and carriages and perform minor wagon repairs.

The signal and communications activities are a vital part of operations, being the element upon which a great deal of the reliability and safety depends. It is in this area that major advances in technology have occurred in recent times.

Mechanical semaphore signals, the controls for which were limited to a few hundred metres, have been superseded by Electrical Centralised Control Systems in which the remote control of points and signals has been extended to hundreds of kilometres.

Communications have moved from the morse telegraph era to modern microwave radio transmission systems and fibre optic cables, where the transmission medium is a light beam passing through optical glass fibre.

The Brisbane Metropolitan Suburban Rail System was electrified with the 25,000 volt alternating current industrial frequency system between 1974 and 1983. This system has provided Brisbane with a most modern electrified rail system with enhanced and regular service frequencies.

The Electrical Engineering Branch is responsible for the design, construction, and maintenance of the overhead wiring and power supply equipment and control.

Operations

The operational performance of the Queensland Railways is depicted in the diagrams on page 89 showing expenditure and revenue for the 1981-82 financial year.

The majority of expenditure is in salaries and wages, indicating that railways are a highly labour intensive industry. Fuel is also an ever increasing proportion of the total operating expenditure.

On the revenue side, the coal and coke market provides in excess of half the total revenue receipts. The other major revenue producing item is general merchandise with a proportion less than 20 per cent.

Passenger traffic does not represent a major item in revenue terms, but Queensland Railways performs an essential service to the community in providing long distance air-conditioned passenger services in country areas and electric air-conditioned commuter services in the suburban areas of Brisbane.

The Department in the Future

The Department today can be summarised as a labour intensive organisation largely dependent upon export coal transportation for its major revenue generation.

A significant expansion of the export coal traffic is forecast for the near future and in this regard the Department is embarking on an extensive electrification program to produce a more efficient transport operation and to liberate the system from dependence on liquid fuel.

As petroliferous fuel becomes a scarce commodity, and therefore more expensive, the role of railways in long distance freight transport will increase because of its inherent efficiency. Both wagon and train loads will increase to provide greater haulage capacity with fewer trains. The role of the Railway Department will be geared more towards the bulk high density long distance freight hauls.

With further advances in technology being applied to progressively upgrade the system and increase efficiency whilst maintaining the already high standards of safety and reliability, Queensland Railways will continue to play a vital role in the State's transport needs.

7 LOCAL GOVERNMENT

History

The Local Government Act of 1936 consolidated all previous Acts and statutory recognition was given to all Cities, Towns, and Shires constituted under those Acts. For further details on the historical growth of local government in Queensland, see the 1977 and earlier issues of the *Year Book*.

The number of Local Authorities increased from 160 in 1902 to 164 in 1910 and 186 in 1916. This was the maximum number reached. There were 170 in 1920 and 148 in 1930. In June 1949 the number was reduced from 144 to 134, in May 1958 to 133, in April 1960 to 132, in April 1961 to 131, and remained at that number until May 1978 when two new Shires, Aurukun and Mornington, were created under the *Local Government (Aboriginal Lands) Act 1978*. A further Shire, Logan, came into operation in March 1979. From 1 January 1981 Logan had its status raised to that of a City. There are now 17 Cities, 4 Towns, and 113 Shires.

Local Authority Councils

Local Authorities are governed by Councils. Under an amendment to the *City of Brisbane Act 1924-1977* the Brisbane City Council was reduced from 29 members (a Lord Mayor and one member from each of 28 electoral wards) to 21 members (21 electoral wards) from the local government elections held on 31 March 1973. (The elected members then appoint the Lord Mayor from among their members.) Other City and Town Councils are composed of 7, 9, or 11 members (including the chairman, called the 'Mayor') and Shire Councils of 5 to 13 members (including the Chairman). The Shires of Torres (since 1952), Cook (since 1959), Aurukun, and Mornington are administered by the Local Government Department. The Governor in Council may, in his absolute discretion, or upon petition of at least one-fifth of the electors of an Area, dissolve the Council and appoint an administrator who is assisted by an executive committee, appointed by the Minister, to carry out the duties of the Council until such time as a new Council is elected at an election directed to be held by the Governor in Council.

The powers and functions of Local Governments are set out in Section 7 of Chapter 22, Public Finance. Decisions of Local Governments made under by-laws or ordinances controlling the use and development of lands are subject to appeal to the Local Government Court. The Court was established in 1966 and operates under the *City of Brisbane Town Planning Act 1964-1983*. Its jurisdiction extends to all Local Governments under the *Local Government Act 1936-1983*.

The municipality of Brisbane was proclaimed on 7 September 1859. The City of Brisbane was created in 1925 under *The City of Brisbane Act of 1924* by the amalgamation of 20 City, Town, or Shire Councils into one civic authority which took over several *ad hoc* boards and public utilities. It is governed by the Local Government Act where its own City of Brisbane Act is silent, or where an ordinance has not been issued under that Act altering the application of the Local Government Act to Brisbane.

Elections

Local Authority Councils are elected by all persons 18 years of age and over for a period of three years. Voting, which is by secret ballot and compulsory, is wholly by post in 54 Shires and partly by post in 16 Shires. In the remaining Local Authority Areas voting is at polling-booths. There is no system of absentee voting on the day of elections as applies at State or Federal elections, though facilities for postal voting are available. Elections are held every three years and from 1970 the election day will be the last Saturday in March or, when Easter Saturday falls on that day, the first Saturday in April.

In Brisbane, one alderman is elected, on preferential voting since 1964, for each of the wards. In other Local Authorities the number of councillors is approved by the Governor in Council. Some Local Authority Areas are divided into divisions for the purposes of elections, while in others the entire Area is treated as one electoral area. In elections, the required number of candidates obtaining the greatest number of votes are elected as councillors, each elector having as many votes as the number of councillors to be elected. The Mayor (or Chairman) is elected separately, and by vote of the entire Local Authority Area, except for the City of Brisbane, where he is elected by his fellow aldermen.

Payments to Members of Local Authorities

The City of Brisbane Act provides for the Lord Mayor and aldermen to receive a salary at such annual rates as the Council shall from time to time determine. Provision is also made for the Lord Mayor to receive an allowance at such rate as is determined in like manner. The annual rates from October 1983 were as follows: Lord Mayor, \$61,649 salary and \$35,084 allowance; Vice-Mayor, Chairman of the Council, and Chairmen of Committees (4), \$40,867; and aldermen, \$32,347 (based upon 80 per cent of the basic salary of members of the Queensland Parliament).

Local Authorities outside the City of Brisbane have power to make by-laws providing for the payment of fees and expenses to members for attendance at meetings and making authorised inspections, but the amount that a member may receive in any one year is limited. In addition, the Local Authority may decide to grant an allowance to the Chairman (or Mayor).

8 DIVISIONS OF QUEENSLAND

There are a number of different types of divisions used for various administrative purposes. The principal types are briefly described in the following paragraphs.

Local Government Areas

Local government areas were created as each part of the State became populated, but since 1916 the trend has been towards a reduction in the number of areas together with the delegation of wider powers.

Local Authority Areas are used as basic districts for the presentation of Population Census and other statistical data.

Counties and Parishes

These divisions have been used throughout the State for survey purposes; and, having followed natural boundaries as far as possible, they have been used as the basis for defining other administrative divisions. Their principal use is in the description of land for titles purposes.

State Electoral Districts

Queensland is divided by the *Electoral Districts Act 1971–1977* into 82 State Electoral Districts, distributed among four zones. These zones are (i) the South-Eastern Zone, comprising the Cities of Brisbane, Gold Coast, Ipswich, Redcliffe, and Toowoomba, and Shires in the south-eastern portion of the State, divided into 47 Electoral Districts; (ii) the Provincial Cities Zone (13 Districts), comprising the Bundaberg Area, the Central Queensland Area, and the Townsville Area (three Electoral Districts each), the Cairns Area (two Electoral Districts), and the Mackay Area and the Mount Isa Area (one Electoral District each); (iii) the Western and Far-Northern Zone (7 Districts); and (iv) the Country Zone (15 Districts). The boundaries of the Electoral Districts were determined having regard to (a) community or diversity of interest, (b) means of communication, (c) physical features, (d) boundaries of Local Authority Areas or Divisions of them, (e) distance from seat of government, (f) density of population, and (g) demographic trends. See maps between pages 64 and 65.

Commonwealth Electoral Divisions

Queensland forms one electorate for the election of Senators. For the election of members of the House of Representatives the State is divided into Electoral Divisions, each returning one member. At the 1983 election there were 19 Divisions. See map between pages 64 and 65.

Wage Districts

The State is divided into five districts for the payment of allowances above the guaranteed minimum wage, the concept of which came into effect on 10 November 1983. These districts are Southern Division (Eastern and Western Districts); Mackay Division; and Northern Division (Eastern and Western Districts) and cover the same areas as the former Basic Wage Districts. Details are given in Chapter 13, Wages and Industrial Conditions.

Land Agents' Districts

The administration of the leasing and development of Crown lands is the function of the Land Administration Commission. Local matters are attended to in 45 Land Agents' Districts, in the principal town of each of which there is a Land Agent's Office where particulars of Crown leasehold land within the district are recorded.

Statistical Divisions

Statistical collections in the State are based generally on Local Authority Areas. For convenience of comparison, the Areas are grouped into Statistical Divisions. The map facing page 1 indicates in red the areas covered by these Divisions, and the maps between pages 224 and 225 show Local Authority Areas in each Division.

The 11 Statistical Divisions are: Brisbane, Moreton, Wide Bay-Burnett, Darling Downs, South-West, Fitzroy, Central-West, Mackay, Northern, Far North, and North-West.

Statistical Districts

Statistical District boundaries have been drawn around selected urban centres, with a population of 25,000 or more, experiencing growth beyond the Local Authority boundary. These Districts are intended to contain the anticipated development of the urban centre and

associated smaller centres for a period of at least 20 years. They are designed to provide comparable statistics over time for urban centres. The seven urban centres so defined are Bundaberg, Cairns, Gold Coast, Mackay, Rockhampton, Sunshine Coast, and Townsville.

Statistics have been published for Statistical Districts for calendar year data from the year ended 31 December 1976 and for financial year data, mainly from the year ended 30 June 1977, but for certain series the year ended 30 June 1976.

Statistical Areas and Suburbs

Because of its large population and size (1,000 square kilometres) the City of Brisbane is too large for statistical analysis as a single entity; therefore, component areas were defined for statistical purposes within the City boundaries. These *Statistical Areas* were analogous in respect of population to Local Authority Areas elsewhere in the State. The boundaries remained virtually unchanged except that, as suburban settlement extended into outlying rural parts of the Local Authority Area, new Statistical Areas were created out of those larger rural areas. Further, as urbanisation extended beyond the boundaries of the City of Brisbane, new Statistical Areas were created covering those parts of surrounding Local Authority Areas brought within the *Brisbane Statistical Division*. There were 66 Statistical Areas at 31 December 1975.

In 1975, the Queensland Place Names Board completed the definition of names and boundaries for 176 Suburbs of Brisbane. Since then further Suburbs have been defined in other Local Authority Areas within the Brisbane Statistical Division. Since the 1976 Census the Bureau collections which previously used the Statistical Areas have used the Suburbs as the basic areal unit. An alphabetical list of the Suburbs is given in Chapter 6, Population.

While most statistical series are available by Suburbs it is not always practical to publish figures on this basis due to constraints of confidentiality and space. For presentation of statistics in these circumstances, Suburbs and other areas within the Brisbane Statistical Division have been grouped into Rings and Sectors.

Statistics have been published for these new areas for calendar year data from the year ended 31 December 1976 and for financial year data, mainly from the year ended 30 June 1977, but for certain series for the year ended 30 June 1976.

Urban Brisbane Area

The concept of delineating, at Census dates, the area within and about the Capital City which had reached a prescribed density of urbanisation, was first enunciated for the 1966 Census. This area was described as the Brisbane Metropolitan Area in reports of the 1966 Census but is now referred to as Urban Brisbane. The area is defined as incorporating all contiguous Census Collection Districts with a population of 200 or more persons per square kilometre, together with certain other areas which meet criteria respecting industrial and institutional areas with lower densities but urban affiliations. The boundary delineated by these rules is drawn without reference to Local Authority Area boundaries and is intended to be a moving boundary, which is to be adjusted after each Census, to encompass additional peripheral urbanisation and population growth.

At the 1976 Census, Urban Brisbane covered an area of 814 square kilometres (547 in the City of Brisbane, 87 in the City of Ipswich, 26 in the City of Redcliffe, 43 in the Shire of Albert, 10 in the Shire of Beaudesert, 6 in the Shire of Moreton, 45 in the Shire of Pine Rivers, and 49 in the Shire of Redland).

By the 1981 Census, Urban Brisbane had extended to cover an area of 884 square kilometres (566 in the City of Brisbane, 89 in the City of Ipswich, 74 in the City of Logan, 26 in the City of Redcliffe, 22 in the Shire of Moreton, 54 in the Shire of Pine Rivers, and 53 in the Shire of Redland). The City of Logan comprises the parts of Albert and Beaudesert Shires shown in Urban Brisbane in previous Censuses.

At both Censuses Urban Brisbane excluded the following water catchment areas: Pine, Logan, and Brisbane Rivers, Tingalpa and Enoggera Reservoirs, and the North Pine Dam.

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Chapter 5

LAND SETTLEMENT

1 GENERAL

The greater part of the territory of Queensland is Crown land held under lease and controlled by the Land Administration Commission under the Minister for Lands, Forestry and Police. The State is divided into Land Agents' Districts, each administered by a Commissioner. Appeals from the Commissioner's decisions are heard by a Land Court, whose functions also include the determination of rent and compensation. A Board attached to the Department of Lands controls Stock Routes. The Department of Mines controls leases and licences of Crown lands for mining and incidental purposes. Control of water resources is under the Queensland Water Resources Commission and the Forestry Department controls the timber resources on Crown lands.

History

Much experience had to be gained before it was possible to survey and to classify the pastoral and agricultural lands of the colony. There was from the outset an eager desire to create more intensive settlement on lands in the possession of the squatters, while on the other hand the pastoral industries required stability of tenure to protect their improvements. These objects were achieved to some extent by the granting of leases to squatters who gave up parts of their occupied land. Agricultural and grazing farms were established and the sale of land brought important revenues for government purposes. The revenue needs of the colony made for a continuance of land sales, but eventually the principle of leasehold became settled policy for pastoral lands.

In 1916 the principle of leasehold tenure was extended to exclude generally the further alienation of any land, and a system of perpetual lease was introduced. Settlement was encouraged by allowing the sale of the rights to these leases after a period without variation in rental because of transfer, and it proceeded on this basis until 1957 except for a period from 1929 to 1932, when the system of purchase on long terms was restored.

Legislation in 1957 restored the system of freeholding, at the option of the selectors or lessees, of town and country land held from the Crown under perpetual lease. Subsequent legislation permitted the conversion to freehold or to perpetual lease of Settlement Farm Leases or of Grazing Selections, and of all industrial lands.

As a result of these policies, the greater part (72.6 per cent) of the land in Queensland at 31 December 1981 remained as Crown land and was leased to the occupiers. Land alienated, or in the process of alienation as freehold land, accounted for 19.6 per cent and unoccupied and unreserved land, roads, stock routes, and public reserves for 7.7 per cent of the total area.

2 AREAS AND TENURES

The next table shows the total area of the State, the area in occupancy, and the areas held under each main group of tenures.

TYPES OF LAND TENURE, QUEENSLAND
(^{000 hectares})

Type of tenure	1976	1977	1978	1979	1980	1981
Freehold						
Alienated by purchase	12,676	12,692	12,746	12,855	13,021	13,228
Alienated without payment	37	37	37	37	37	37
In process of alienation	18,227	18,779	19,218	19,584	20,294	20,658
Total freehold	30,941	31,508	32,002	32,476	33,353	33,923
Leasehold						
Pastoral tenures	99,934	97,787	97,438	96,992	96,291	97,055
Selection tenures	26,560	27,663	27,539	26,813	26,271	23,307
Special leases	3,117	3,370	3,441	3,588	3,841	4,025
Development leases	—	2	2	2	2	2
Country, suburban, and town lands perpetual leases	21	19	23	27	26	28
Leases, claims, and licences under mining acts (a)	172	178	175	174	176	177
Aboriginal land leases (b)	—	—	869	869	869	869
Total leasehold	129,804	129,019	129,487	128,465	127,476	125,462
Reserves (excluding leased area)	7,852	8,783	7,998	8,614	8,551	} 13,315
Roads and stock routes	1,958	1,874	1,870	1,856	1,840	
Unoccupied and unreserved	2,146	1,516	1,344	1,288	1,480	
Total area of State	172,700	172,700	172,700	172,700	172,700	172,700

(a) Net area, i.e. the area which is not also reserved or leased for other purposes. For total area for 1981, see the table 'Land Held under Mining Acts'.
(b) Aurukun and Mornington Island. Previously included in 'Reserves'.

Freehold Land

Freehold or fully alienated land is practically all registered under the Torrens system and all transfers and interests in such land are recorded by the Titles Office.

Leasehold Land

The leasing of Crown lands is the primary function of the Land Administration Commission which is also charged with surveying, re-designing or sub-dividing, and leasing such lands as revert to the Crown by resumption, or by the expiry, surrender, or forfeiture of existing tenures. By this system of reversion of land the Crown obtains, without the cost of purchase at values enhanced by developing public works, control over a continuing succession of land areas which it may make available for closer settlement or for re-allotment.

The general policy in regard to leasehold tenures is to make each property of a sufficiently large area to permit a reasonable living to be made from it after providing a reserve for bad seasons, and to make the term sufficiently lengthy to encourage the lessee to make permanent improvements adequate to the capacity of the property. When a Pastoral Lease or Grazing Selection expires or is surrendered, and is made available under selection tenure, the late lessee has priority in respect of the whole area if the land is not suitable for sub-division or in the selection of at least a good living area if the property is sub-divided. To improve security of tenure a lessee may apply for a new lease at any time within the last 10 years of the current lease. A new lease over the whole or part of the existing lease may be offered by the Crown, but the lessee is not bound to accept. Instead, he may allow the existing lease to run to expiry and then assert his priority rights.

Application for blocks under Pastoral Lease or Selection Tenure is open to persons who are qualified according to the conditions of eligibility laid down in each case. Where there is more than one applicant for a block the successful applicant is determined by ballot. Rental values, based on the unimproved value of the land, are fixed for the initial period by the Crown and

thereafter by the Land Court. Perpetual Leases of Country, Town, and Suburban Allotments are determined by auction, annual rental being fixed at 3 per cent of the amount bid.

Pastoral Tenures

A number of pastoral properties are still held in large Pastoral Leases, areas of 1,300 square kilometres for sheep and 3,900 square kilometres for cattle being not uncommon. Leases are generally for terms up to 30 years in ten-year rental periods, but may be longer for Development Holdings subject to very extensive development conditions, and for Stud Holdings. Where the Crown may foresee possibilities of future closer settlement, Pastoral Holding leases are granted. These reserve to the Crown certain rights of resumption of up to one-third of the total area after the first 15 years of the lease.

Where the re-leasing of pastoral land is under review and the land may be dealt with under a more secure tenure at any time, it may be leased under a temporary yearly tenancy, known as an Occupation Licence. A further type of tenure is the Special Lease of Forest Reserves, which permits the use for grazing purposes of Forest Reserves, so utilising the grass for stock and keeping down undergrowth and pests while retaining the land for timber.

Selection Tenures

Grazing Selections represent the closer settlement of the more accessible and better quality pastoral lands and are granted in areas of up to 24,000 hectares. Settlement Farm Leases with a maximum area of 2,400 hectares are designed to cover lands suitable for grazing in conjunction with agriculture. Both these tenures have terms up to 30 years, and are subject to conditions of personal residence. Agricultural Selection Leases cover smaller properties on land suitable for mixed farming and dairying.

All of these selection tenures may be converted to freehold tenure after 40 years by annual payments equal to one-fortieth of the purchase price, free of interest. Earlier freeholding is possible on payment of the balance then outstanding and the fulfilment of all imposed conditions. In addition, Agricultural Selections and Grazing Selections of not more than 2,000 hectares may be held under Perpetual Lease tenure, with the rental being subject to review at intervals of 10 years, the rent being determined at $2\frac{1}{2}$ per cent of the unimproved capital valuation.

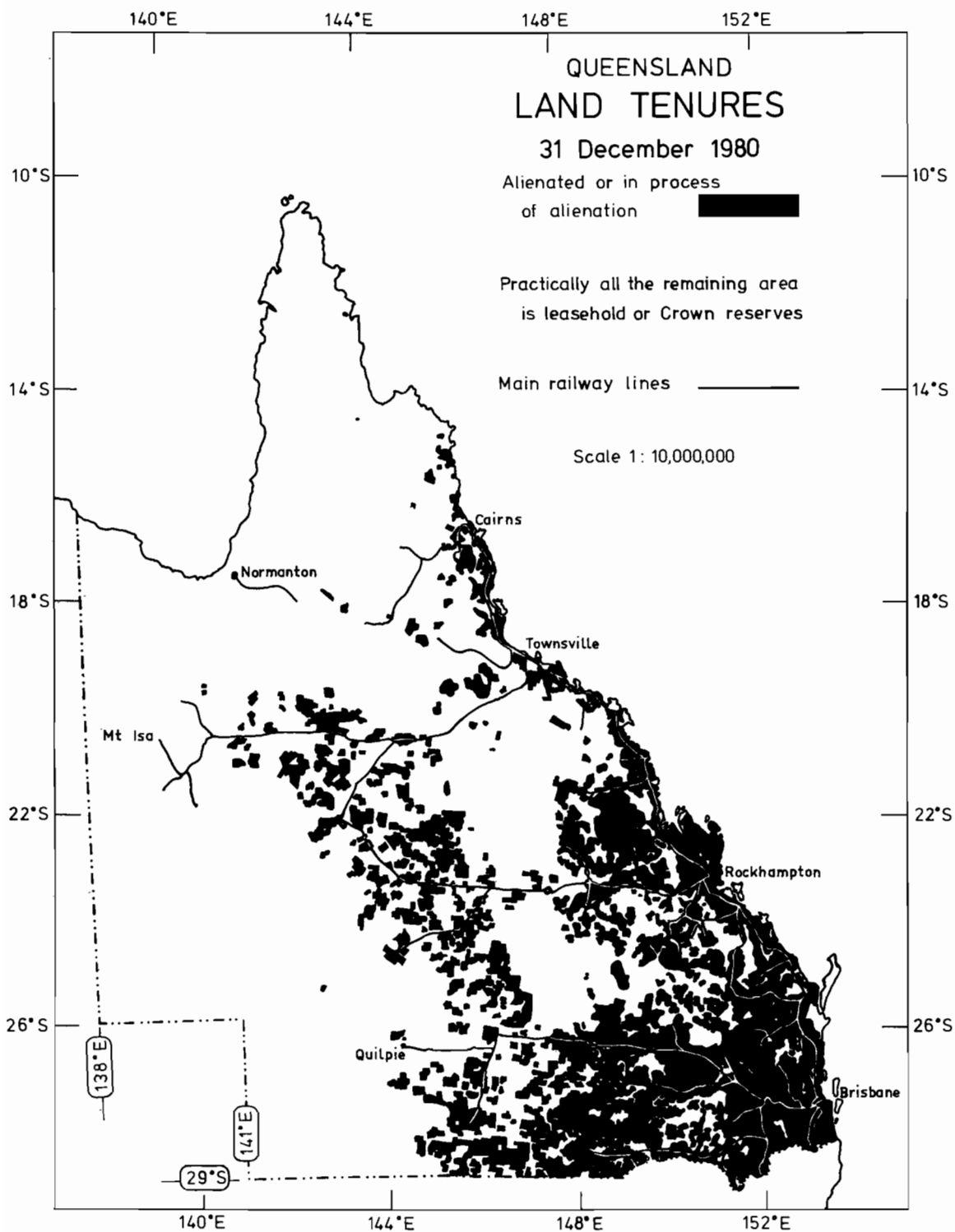
Brigalow Lands Development Scheme

Development and closer settlement of the brigalow lands in the Fitzroy Basin with a view to increased beef production was undertaken by agreement between the Commonwealth and State Governments under the terms of the *Brigalow and Other Lands Development Act 1962-1978*.

The scheme involved the acquisition of existing leasehold holdings (by negotiation rather than by resumption) and clearing and improving them before making them available as smaller holdings, as well as providing land for State and Local Authority reservations, National Parks, Flora and Fauna, and Timber Reserves. The acquisition and settlement of lands were completed in 1975. In addition to 113 retention areas granted to former lessees, 170 blocks had been allocated by ballot, 132 as Purchase Leases, and 38 as Grazing Selections, and 77 blocks had been auctioned as freehold.

Special Leases

These are conditional leases of Crown land for specific manufacturing, industrial, residential, or business purposes; or of public reserves for public purposes. Special Leases of Forest Reserves are granted for grazing purposes and are more common in western areas of the State. The leases are for periods up to 30 years. They are offered by public auction to the bidder of the highest annual rent, and may be converted to Perpetual Lease tenure or to freehold.



Development leases are issued to private interests to develop or sub-divide Crown land for industrial, residential, or tourist purposes. On fulfilment of the imposed conditions, the lessee may sell the land, or part of it, paying an agreed percentage of the sale price to the Crown in return for the issue of freehold title.

Country, Suburban, and Town Lands

These are leased under Auction Perpetual Lease tenure at an annual rental equal to 3 per cent of the amount bid at auction by competitors for the land. Town Leases cover residential allotments not exceeding $\frac{1}{2}$ hectare, Suburban Leases cover areas not exceeding 8 hectares, and Country Leases cover farms not exceeding 1,036 hectares. This type of tenure has also been frequently used in opening up new seaside and other areas for development. Conditions may be imposed as to the minimum amount of improvements to be made.

Land Subject to Mining Acts

Crown land and private land as defined in the Mining Act may be held for mining purposes under mining lease tenure. Crown land may also be held under mining claim tenure. Mining leases and mining claims are known collectively as mining tenements. The mining claim tenure is lower in status.

Mining leases may be granted for winning of mineral from land and for associated purposes. Application is made to the District Warden. Mining leases are subject to conditions such as continuous and bona fide use, payment of rental, and performance of labour conditions. It is advantageous, although not necessary for a lessee of, or an applicant for, a mining lease to hold a miner's right, but it is necessary to hold a permit to enter when application is made for a mining tenement in private land.

Mining leases may be granted for a term not exceeding 21 years and may be renewed accordingly. The maximum area of a mining lease is 130 hectares but greater areas may be granted in certain circumstances. One man must be employed for every 4 hectares leased, except in dredging operations where three men must be employed for every 40 hectares leased, as well as other conditions. Expenditure of certain sums of money may be approved as an alternative to direct employment of labour.

From 1 January 1984 mining leases attract rental at the rate of \$18 per hectare a year plus a royalty on production of some minerals, while for others it is based on the value of production. For coal the annual rental is \$18 per hectare plus a royalty which is payable under the *Mining Royalties Act* 1974 but varies according to those provisions. On mining leases for coal, one man must be employed for every 16 hectares for each of the first two years and for every 8 hectares every year thereafter.

The holder of a miner's right costing \$10 a year, from 1 September 1983, may take possession of any unoccupied Crown land for mining purposes, without the necessity of a title, provided he only hand mines. Such holder of a miner's right may also hand mine on occupied Crown land without a title, provided he has the written consent of the occupier of such occupied Crown land. 'Hand mining' has been defined as 'mining using only picks, shovels, hammers, gads, sieves, windlasses, and other like tools which are used manually'. During 1982, 6,362 miners' rights were issued. A mining claim is made by staking the four corners of an allowable area and seeking registration of the mining claim by the local warden. Provided that the mining claim is continuously worked and prescribed labour conditions are fulfilled, the holder has recognised rights to the land and the minerals mined under the authority of the mining claim.

From 1 January 1984 an annual rent of \$10 is payable in respect of each registered mining claim. If rent remains unpaid after 31 December of each year, the mining claim becomes liable to cancellation.

Miner's Homestead Leases provide for the settlement of mining fields by permitting the holding of land for purposes of residence. The maximum area within a town boundary is 4,000

square metres or such greater area as the Governor in Council may approve and elsewhere 32 hectares or such greater or lesser area as the Governor in Council may approve. They are available on application to the warden or by auction. Such land may be applied for as a mining lease or it may be taken up for mining purposes by the holder of a miner's right, but arrangements must be made for compensation to the lessee. Leases now being issued are all perpetual leases, the annual rental being 3 per cent of the capital or purchase value, which is reviewed every 10 years by the warden on application by the lessee or the Minister.

Petroleum Leases may be granted under the *Petroleum Act* 1923–1983 where payable deposits of petroleum are discovered. They give underground rights and, subject to compensation agreements, entitle the lessee to occupy such areas as necessary to effectively carry on the mining operation. They are intended to cover areas not exceeding 260 square kilometres at an annual rental of \$20 per square kilometre, deductible from the prescribed royalty of 10 per cent of the selling value of the production.

The *Petroleum (Submerged Lands) Act* 1967 provides for the exploration for, and the exploitation of, petroleum resources on the Continental Shelf and sea-bed in territorial waters adjacent to the coast. At 31 December 1982, 8 Exploration Permits were in existence.

Authorities to Prospect may be granted to applicants intending to undertake large-scale exploration or prospecting, or geological or geophysical testing. Areas, rents, terms, and conditions are determined by the Minister. At the end of 1982 there were 365 Authorities to Prospect for Minerals covering 70,451 square kilometres, 91 Authorities to Prospect for Coal covering 37,055 square kilometres, and 90 Authorities to Prospect for Petroleum covering 1,493,968 square kilometres.

LAND HELD UNDER MINING ACTS, QUEENSLAND, 31 DECEMBER 1982

Type of tenure	Leases	Total area	Average area
	No.	hectares	hectares
Mining leases	5,818	519,010	89
Petroleum leases	19	450,700	23,721
Special bauxite leases	3	583,142	194,381
Miner's homestead leases	24,590	177,320	7
Claims etc.	3,971	3,889	1
Total	34,401	1,734,061	50

Various agreements between the State Government and certain companies for the purpose of working minerals and coal in the State are contained in Special Acts of Parliament. Concessions are features of the agreements in return for the development of the areas in question.

Reserves

Areas throughout the State are reserved to the Crown for specific purposes, e.g. State forests and timber reserves, national parks and environmental parks, and Aboriginal reserves. For details of these areas see Chapter 17, Mining, Forestry, and Fisheries, Section 5, Chapter 1, Geography and the Environment, Section 7, and Chapter 11, Social Welfare, Section 9, respectively.

3 SOIL CONSERVATION

The erratic rainfall patterns, high rainfall intensities, soil types, and the management conditions applied to many of Queensland's agricultural soils, particularly those on sloping land, make them susceptible to water erosion.

It is estimated that of the 162m hectares of land used in Queensland for agricultural purposes, 43 per cent requires soil conservation measures (either improved land management practices alone, or a combination of land management practices and soil conservation works).

Soil conservation measures are needed on some 42 per cent of the 159.2m hectares of grazing land, and on 90 per cent of the 2.8m hectares of cropping land. Improved land management practices alone are sufficient to control erosion on 31 per cent of the grazing land and 19 per cent of the cropping land. In addition to the relatively inexpensive land management practices, more costly soil conservation works are also required on 11 per cent of the grazing land and 71 per cent of the cropping land.

Wind erosion has affected a smaller area of the cultivated lands than water erosion, but it has had serious effects in many of the grazing districts of the south-west, where 'scalded' areas are quite common.

The main soil conservation needs of the State at 30 June 1983, which were estimated by the Department of Primary Industries, are as follows.

Zone				Area of cultivated land requiring soil conservation measures	Area protected by soil conservation measures
				'000 hectares	'000 hectares
Southern	..	..	..	1,215.0	483.2
Eastern	..	..	..	395.5	188.1
Northern	..	..	..	802.4	327.7
Total	..	..	..	2,412.9	999.0

The Department of Primary Industries provides a special advisory service in soil conservation with 84 field officers and 20 research officers stationed at 32 centres throughout the State. Some 11,400 landholders are using this service.

Soil conservation measures recommended include stubble retention, contour cultivation, special tillage practices, and rotation of crops or crops and pasture on a contour strip-cropping pattern. Control of storm run-off water is achieved through schemes comprising diversion banks and contour banks spaced at intervals down vulnerable slopes, discharging into stable natural watercourses or constructed waterways protected by suitable grasses.

The *Soil Conservation Act* 1965-1982 provides the statutory facilities for landholders to undertake joint soil conservation activity, either under government guidance or through local sponsorship and leadership. Provision is made for financial assistance by way of loans through the Agricultural Bank. Planned implementation of soil conservation measures is carried out using the Area of Soil Erosion Hazard provisions of the Act.

Eleven of the 14 shires of the Darling Downs region were declared as Areas of Soil Erosion Hazard in 1973. Landowners are subsidised by the Government on a dollar for dollar basis up to \$1,500 per farm for the implementation of approved soil conservation works. The Gin Gin and Isis areas near Bundaberg have also been declared as Areas of Soil Erosion Hazard. Cane farmers are being assisted to move from eroded hillsides to more gently sloping land in the coastal lowlands. An upper subsidy limit of \$1,000 per farm enterprise applies in these areas.

Conservation farm planning is carried out for both individual farms and groups of farms in sub-catchments. Some 461,000 hectares of land, involving 2,910 landholders, has been planned since the inception of the scheme, on 18 January 1973, to 31 May 1983. Approximately \$1.97m has been paid as subsidies on works implemented under these plans.

4 IRRIGATION AND WATER CONSERVATION

The important primary industries of Queensland are subject to relatively frequent and serious losses by drought and also to extensive flooding. There is therefore a definite need for the provision of works for water conservation for irrigation and stock watering and for flood mitigation.

The average annual flow of all streams in Queensland, equivalent to approximately 40 per cent of that for all Australian streams, gives ample scope for such works.

The right to the use and flow and to the control of water in watercourses, lakes, springs, and artesian wells in Queensland vests in the Crown, and the Commissioner of Water Resources is authorised to take measures to conserve water and provide for its more equal distribution and beneficial use.

Water Resources Investigation

The Commissioner of Water Resources is required, under the *Water Resources Administration Act* 1978–1981, to (a) assess and measure the State's water resources, both surface and underground; (b) evaluate the present and future water requirements of the State; and (c) investigate and formulate plans for the conservation, replenishment, protection, utilisation, and distribution of the water resources of the State.

For this purpose the Commission operated 587 stream gauging stations at 30 June 1982, 562 of them being equipped with automatic water level recorders, and collected rainfall data from 65 stations in addition to the Bureau of Meteorology stations.

Licensing and Control

As required under the *Water Act* 1926–1983 rights to underground and surface water are allocated and their use controlled by a system of licensing of (a) all artesian bores in the State; (b) all sub-artesian bores in areas proclaimed by the Governor in Council—the main purpose of proclaiming areas is to ensure the equitable distribution of available supplies and to obtain information on the quantity, quality, extent, and use of those supplies; and (c) all conservation and use, other than for stock and domestic supplies, of flow in watercourses.

At 30 June 1982, 16,908 Waterworks Licences were in existence, 12,024 being for pumps, 3,866 for dams and weirs, and 1,018 for other works.

Areas of sub-artesian water supply proclaimed by the Governor in Council, in which all bores and wells require a licence, total 1,469,643 square kilometres. A total of 37,339 bores, artesian and sub-artesian in proclaimed areas, was registered at 30 June 1982.

Development of Water Resources

The Queensland Water Resources Commission is required to prepare a co-ordinated program of work for the conservation, utilisation, and distribution of water resources, and to make recommendations to the Government regarding the carrying out of works in this program.

The Commission is principally responsible for water conservation and supply works for rural purposes, including irrigation, stock, and domestic supply. However, in planning such works, particularly storages, economies to all users can accrue by providing where possible for dual or multi-purpose use of works for irrigation, rural, urban, and industrial, including power generation and mining purposes. From December 1974 the Commission has become the sole authority for planning, design, and construction of all major dams in Queensland.

Urgent water requirements of the expanding mining activities have brought out the need to further ensure the orderly and efficient development of the limited water resources and to provide for immediate and future needs for urban, mineral, and rural purposes.

Water Conservation

The following two tables list storages completed and under construction at 30 June 1982 showing the name of the storage, locality, capacity, and the purposes for which used. The list is limited to those storages with a capacity of 20,000 megalitres or more.

EXISTING WATER STORAGES, QUEENSLAND, 30 JUNE 1982

Name of storage	Stream and nearest town	Storage capacity (megalitres)	Purpose
Atkinson	Atkinson's Lagoon, Lowood ..	31,300	Irrigation
Awoonga	Boyne R., Gladstone	255,000	Irrigation and city supply
Beardmore	Balonne R., St George	101,000	Irrigation
Borumba	Yabba Ck, Imbil	42,600	Irrigation and city supply
Callide	Callide Ck, Biloela	57,600	Callide Power Station and irrigation
Cania	Three Moon Ck, Monto	89,000	Irrigation
Cooby Creek	Cooby Ck, Oakey	23,100	City supply
Coolmunda	Macintyre Brook, Inglewood ..	75,200	Irrigation
Eungella	Broken R., Eungella	131,000	Irrigation and mining
Fairbairn	Nogoa R., Emerald	1,440,000	Irrigation, mining, and urban supply
Fitzroy River Barrage ..	Fitzroy R., Rockhampton	66,000	City supply
Fred Haigh	Kolan R., Gin Gin	586,000	Irrigation and town supply
Glenlyon	Pike Ck, Stanthorpe	(a) 127,000	Irrigation, border streams
Hinze	Nerang R., Nerang	41,700	City supply
Julius	Leichhardt R., Mount Isa	127,000	Mining and city supply
Koombooloomba	Tully R., Ravenshoe	200,700	Hydro-electricity and irrigation
Lake Manchester	Cabbage Tree Ck, Ipswich	25,700	City supply
Lake Moondarra	Leichhardt R., Mount Isa	106,100	City supply and recreational
Lake Morris	Freshwater R., Cairns	45,500	City supply
Leslie	Sandy Ck, Warwick	47,100	Irrigation and city supply
Maroon	Burnett Ck, Boonah	38,400	Irrigation
Moogerah	Reynolds Ck, Kalbar	92,500	Power station and irrigation
North Pine	North Pine R., Petrie	202,000	City supply
Perseverance Creek ..	Perseverance Ck, Toowoomba ..	30,300	City supply
Ross River	Ross R., Townsville	417,000	City supply and flood control
Somerset	Stanley R., Esk	893,000	Brisbane-Ipswich supply, flood mitigation, hydro-electricity
Splityard Creek	Pryde Ck, Fernvale	28,600	Hydro-electricity
Tinaroo Falls	Barron R., Atherton	407,000	Hydro-electricity and irrigation
Wuruma	Nogo R., Eidsvold	194,000	Irrigation

(a) Full capacity 254,000 megalitres, 50 per cent of which is available to Queensland.

WATER STORAGES UNDER CONSTRUCTION, QUEENSLAND, 30 JUNE 1982

Name of storage	Stream and nearest town	Storage capacity (megalitres)	Purpose
Bjelke-Petersen	Barker Ck, Murgon	125,000	Irrigation
Boondooma	Boyne R., Proston	212,000	Power station and irrigation
Burdekin Falls	Burdekin R., Ayr	1,860,000	Irrigation
Kinchant	Sandy Ck, North Eton	(a) 62,800	Irrigation and city supply
Mary Barrage	Mary R., Maryborough	29,000	Irrigation
Wivenhoe	Brisbane R., Fernvale	1,150,000	Brisbane-Ipswich supply and flood mitigation

(a) Initial stage, providing a storage of 11,000 megalitres, completed.

Irrigation Areas

About 19.2 per cent of the area under irrigation in the State is concentrated in irrigation areas constituted under the *Irrigation Act* 1922-1979, where the supply is generally reticulated by channel systems, by means of gravity or pumping, from the storage. In addition some supply is also provided from streams regulated by the storage. Details of irrigation areas established and under construction at 30 June 1982 are set out below.

- (a) Dawson Valley Irrigation Area. This area situated around the town of Theodore is supplied by four weirs on the Dawson River. Pumping stations deliver water through channel systems to 71 farms. Cotton and grain crops account for the major part of production from irrigated farms. In addition the towns of Theodore, Cracow, Moura, and Baralaba and the Thiess-Dampier Mitsui Mining Group obtain supplies from the storages.

- (b) **Burdekin River Irrigation Area and Water Supply Scheme.** This scheme is a complex system of water conservation, irrigation, urban, and stock water supply. Present storages are Eungella Dam on the Broken River, and Gorge, Blue Valley, and Clare Weirs on the Burdekin River.

From Eungella Dam water is diverted directly by a privately owned 121 kilometre piped supply system to coal mining operations at Goonyella and Peak Downs and the town of Moranbah.

Supplies for other purposes are maintained along the Bowen River and lower 114 kilometres of the Burdekin River by release of water from the storage as required. These purposes and the arrangements for supply comprise: (i) a pumping station on the Bowen River delivering supply through 34 kilometres of pipeline to the Collinsville Power Station, Collinsville Town, and grazing holdings along the pipeline; (ii) pumping stations delivering water through channel systems to 132 individual irrigated holdings in the Clare, Millaroo, and Dalbeg sections of the Burdekin River Irrigation Area, the principal crops from irrigated farms being sugar cane and rice; and (iii) private diversion by pumping for irrigation on holdings along the Bowen, Broken, and Burdekin Rivers.

- (c) **Mareeba-Dimbulah Irrigation Area.** This area is supplied by Tinaroo Falls Dam and weirs on the Barron and Walsh River systems. Water is delivered through channel systems and regulated streams to 579 farms on which the principal crop is tobacco. In addition, water is supplied to the towns of Mareeba and Dimbulah, and to the hydro-electric generating station at Barron Falls.
- (d) **St George Irrigation Area.** The principal storages of this area, located near the town of St George, are Beardmore Dam and Jack Taylor Weir on the Balonne River and 2 weirs on Thuraggi Watercourse. During 1981–82 water was supplied to 90 farms, on which the principal crops are cotton and soybeans, and to the town of St George.
- (e) **Emerald Irrigation Area.** This scheme, a joint Commonwealth Government and State Government undertaking, involved the construction of Fairbairn Dam on the Nogoa River, some 19 kilometres upstream from Emerald. During 1981–82 water was supplied to 60 farms from the channel system and to 18 farms by private diversions with the principal production being cotton, wheat, and soybeans. In addition, supplies were made to the town of Emerald and the Gregory Coal Mine.
- (f) **Bundaberg Irrigation Scheme.** This scheme consists of the Bundaberg Irrigation Area and the Upper Burnett Irrigation Project and is aimed at raising the efficiency and security of the established sugar industry in the region. Storages comprise the Wuruma Dam (capacity 194,000 megalitres) on the Nogo River, Mundubbera Weir (4,930 megalitres) and the Burnett Barrage (16,500 megalitres) on the Burnett River, and Fred Haigh Dam (586,000 megalitres) and the Kolan Barrage (4,000 megalitres) on the Kolan River. Supply is by channel systems and private diversion from streams. In addition to irrigation, the scheme augments supply to the city of Bundaberg, and assures supply to the towns of Eidsvold, Mundubbera, Gayndah, and Wallaville.
- (g) **Eton Irrigation Area.** This project will provide irrigation water for some 8,000 hectares of cane lands in the North Eton area, assured irrigation supplies along the Pioneer River, and urban and industrial supplies for the city of Mackay. The scheme consists of the Mirani Weir and Kinchant Dam (capacity 62,800 megalitres). The initial stage of Kinchant Dam, providing a storage of 11,000 megalitres, has been completed. The dam supplies water by means of distribution channels to individual farms in the area.

Irrigation Projects

There are schemes, established under the *Water Act* 1926–1983, where water from storage is released downstream to maintain adequate supplies for private pumping under licence for irrigation and other purposes.

IRRIGATION PROJECTS, QUEENSLAND, 1981–82
(Source: Queensland Water Resources Commission)

Project	Storage	Licensed pumps at 30 June	Water supplied	
			Irrigation	Other purposes
		No.	megalitres	megalitres
Callide	Callide Dam	—	—	(a) 3,488
Chinchilla Weir	Chinchilla Weir	26	827	(b) 117
Dumaresq	Glenlyon Dam	165	13,663	(b) 1,176
Fitzroy River Barrage	Fitzroy River Barrage	75	2,555	—
Julius Dam	Julius Dam	—	—	(c) 1,532
Logan River	Maroon Dam	138	4,089	(c) 1,018
Lower Lockyer	Atkinson Dam	192	6,161	—
Macintyre Brook	Coolmunda Dam	147	5,595	(b) 351
Mackenzie River	Bedford and Bingegang Weirs	(d)	—	(d) 10,799
Mary Valley	Borumba Dam	200	5,396	(c) 3,645
Upper Burnett	Wuruma Dam and Mundubbera Weir	185	16,244	(e) 1,000
Upper Condamine	Leslie Dam	71	6,714	(b) 1,046
Warrill Valley	Moogerah Dam	360	5,947	(f) 7,716

(a) Calcamp Power Station and underground recharge. (b) Urban. (c) Urban and industrial. (d) Water is supplied by pipelines to coal mines and to the towns of Blackwater, Bluff, and Dysart. (e) Urban and rural. (f) Power generation, urban, and rural.

Work has commenced on the Wivenhoe Dam to be built at 150 km on the Brisbane River for Brisbane-Ipswich water supply and flood mitigation. The capacity for water supply will be 1,150,000 megalitres and, above this, up to 1,450,000 megalitres will be available for flood storage. The storage will also serve as the lower reservoir for the 500 MW Wivenhoe Pumped Storage Hydro-electric Scheme. Splityard Creek Dam provides the upper storage for this scheme. This dam, completed in 1980, has a storage capacity of 28,600 megalitres and is situated near the junction of Splityard and Pryde Creeks.

Work has commenced on the construction of Boondooma Dam on the Boyne River with a storage capacity of 212,000 megalitres. The dam will supply water for the thermal power station at Tarong and for irrigation along the lower Boyne River.

Construction of the Burdekin Falls Dam as part of the Burdekin River Project Irrigation Undertaking has also commenced. The dam will have a capacity of 1,860,000 megalitres and will supply an expanded Burdekin Irrigation Area.

Farm Water Supplies

Under the *Farm Water Supplies Assistance Act* 1958–1979, technical assistance is available to landholders throughout the State on all matters relating to water conservation and utilisation for domestic, stock, and irrigation purposes, on individual holdings or groups of holdings covering construction of farm dams, irrigation bores and stock bores, and pumping and distribution systems. In addition, the Government provides finance to farmers by way of special Agricultural Bank loans, and technical advice on construction and installation.

Underground Water Supplies

The availability of underground water in Queensland has played a very big part in the development of the pastoral industry, and of irrigation on individual farms, particularly along the coastal fringe. The most important areas where water from this source is used for irrigation are in the following river basins: the Lower Burdekin, the Don (Bowen), the Pioneer, the Callide

Valley, the Lower Burnett, many parts of the Brisbane Basin, including the Lockyer, and parts of the Upper Condamine Basin.

The artificial replenishment of underground water supplies has been implemented in the Burdekin Delta. The North and South Burdekin Water Boards divert unregulated supplies of water from the Burdekin River for the purpose of artificially recharging the underground supplies from which some 26,800 hectares of sugar cane are irrigated and supplies for stock and domestic purposes are drawn.

The Great Artesian Basin in Queensland consists approximately of the area lying west of the Great Dividing Range, excluding the Cloncurry Mineral Field and the Barkly Tableland. It comprises 1,124,000 square kilometres, or about two-thirds of the total State area. This part of the State is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores.

At 30 June 1982, a total of 3,450 artesian bores had been drilled in the Great Artesian Basin, of which 2,358 continued to flow, providing a supply of 807 megalitres a day. Although this supply will continue to diminish for a further 30 to 40 years, after that time a steady and continuous flow of some 592 megalitres a day is expected to be maintained.

Irrigation on Agricultural Establishments

Statistics on irrigation are collected on a rotational basis only. The 1980-81 figure for total area under agriculture was 2.6 million hectares, from which the value of production was approximately \$1,455m. Of this area some 255,700 hectares were irrigated from which the value of crops was estimated at \$458m.

According to returns received from agricultural producers, crops or pastures were irrigated on 8,421 establishments, or 23.4 per cent of all agricultural establishments in the State in 1980-81. The irrigated area of crops (excluding sown pasture) was 222,003 hectares, or 8.6 per cent of the total area under crop. In addition there were 14,020 hectares of lucerne irrigated and 19,684 hectares of other sown and native pastures. The average area irrigated per establishment using irrigation was 30 hectares.

Although a greater number of irrigators use surface water from streams, weirs, lagoons, etc. to irrigate their crops, more land is actually irrigated from underground water sources such as bores, spears, and wells. During 1980-81, water from underground sources was used to irrigate 129,398 hectares on 3,646 establishments, while surface water was used to irrigate 125,939 hectares, as follows: from water supplied in irrigation areas and districts, 52,923 hectares on 1,252 establishments; from rivers, creeks, lakes, etc., outside such areas, 51,082 hectares on 2,736 establishments; and from farm dams, 21,934 hectares on 1,664 establishments. In addition, on 35 establishments mainly around Brisbane, 370 hectares were irrigated from town water supplies.

CROPS AND PASTURES IRRIGATED, QUEENSLAND

Crop	1978-79			1980-81		
	Total area	Area irrigated	Proportion irrigated	Total area	Area irrigated	Proportion irrigated
	hectares	hectares	%	hectares	hectares	%
Sugar cane	330,160	79,114	24.0	354,874	101,715	28.7
Cereals (all purposes)	1,620,113	35,753	2.2	1,830,248	49,455	2.7
Tobacco	3,792	3,616	95.4	3,454	3,293	95.3
Cotton	14,442	13,448	93.1	24,182	20,728	85.7
Fruit	22,504	6,622	29.4	24,085	8,027	33.3
Vegetables	28,132	20,385	72.5	26,510	19,456	73.4
Other crops	350,897	20,598	5.9	310,442	19,329	6.2
Lucerne	n.a.	11,241	n.a.	n.a.	14,020	n.a.
Other pastures	n.a.	18,439	n.a.	n.a.	19,684	n.a.
Total	n.a.	209,216	n.a.	n.a.	255,707	n.a.

The next table shows the distribution of irrigated crops.

DISTRIBUTION OF IRRIGATED CROPS AND PASTURES, QUEENSLAND, 1980-81
(hectares)

Statistical Division	Sugar cane	Tobacco	Cotton	Fruit and vegetables	Other crops	Lucerne	Other pastures	Total
Moreton (a)	87	323	213	13,334	13,150	6,075	6,488	39,670
Wide Bay-Burnett	37,788	276	—	4,394	6,465	3,423	5,403	57,749
Darling Downs	—	188	4,515	2,874	34,064	2,308	2,063	46,012
South-West	—	—	5,359	30	2,378	63	395	8,225
Fitzroy	—	—	10,641	474	6,994	2,041	1,531	21,681
Central-West	—	—	—	1	17	7	60	85
Mackay	27,231	—	—	49	83	9	646	28,018
Northern	34,845	31	—	4,012	4,015	76	600	43,579
Far North	1,764	2,475	—	2,315	1,585	18	2,495	10,652
North-West	—	—	—	—	33	—	3	36
Total Queensland ..	101,715	3,293	20,728	27,483	68,784	14,020	19,684	255,707

(a) Including Brisbane Statistical Division.

The Bradfield Scheme

(Contributed by the Co-ordinator-General, Premier's Department)

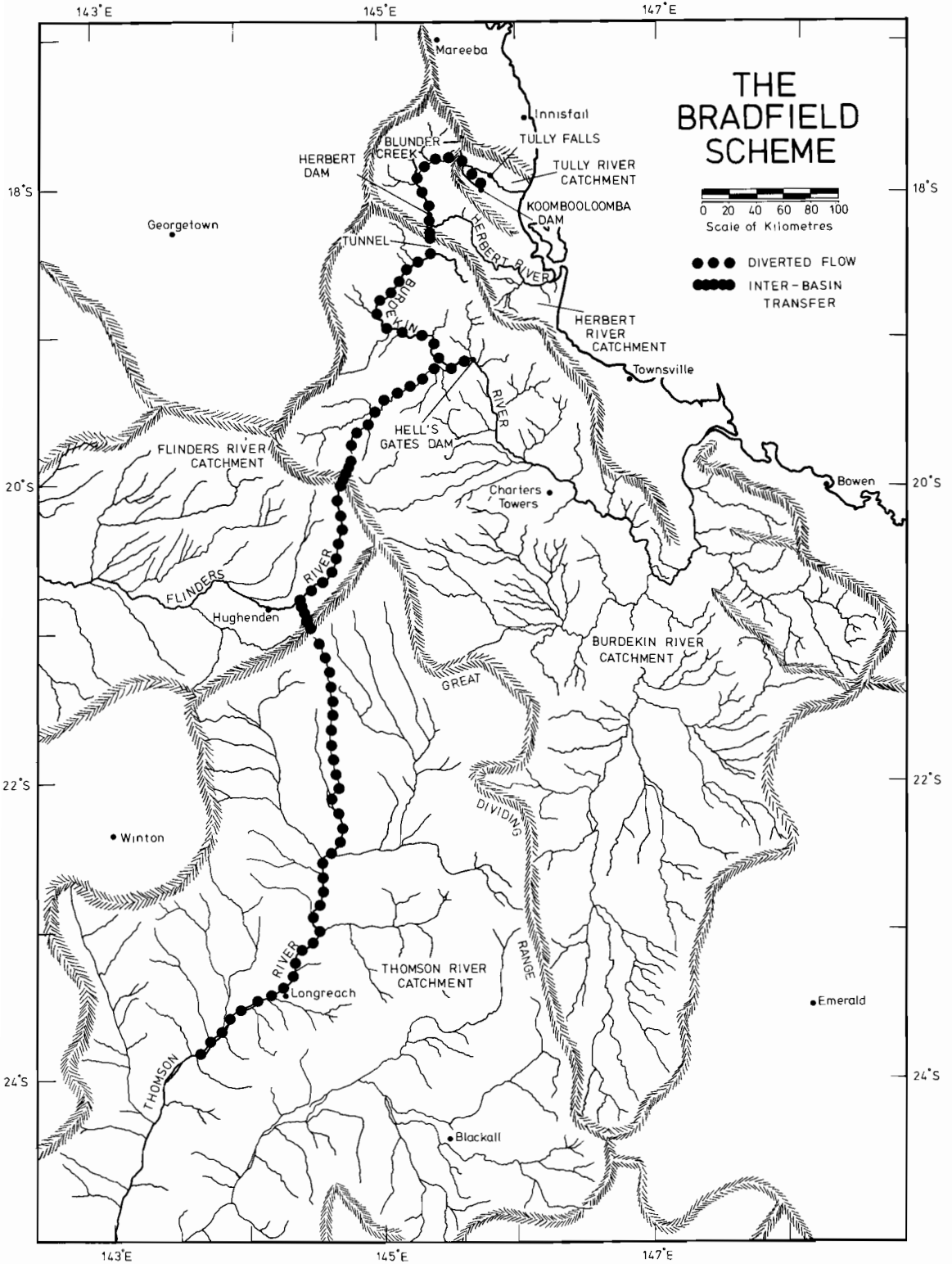
The major concept in Dr John Job Crew Bradfield's 1938 scheme for inter-basin transfer was to divert water across the Great Dividing Range 'to amplify the inland water resources of Queensland'. A map of his scheme is shown on page 109. His emphasis was on provision of water for stock and fodder to offset the recurring problem of drought plus recharge of the aquifers for the Artesian Basin. Bradfield, in 1938, paid relatively little attention to the use of transferred water for irrigated agriculture or to the competing demands for water for irrigation and hydro-power generation east of the Divide.

As shown in the map, Bradfield proposed to divert water from the Tully River to the Herbert thence to the Burdekin with progressive additions from each river. Water finally stored on the Upper Burdekin at Hell's Gates would flow by gravity south-westwards to the Flinders River and then to the Thomson River which would be the main distributor. William Nimmo, in 1947, in critically reviewing the Bradfield concept, was able to use expanded information on topography and on river flows that was not available to Bradfield. Nimmo showed that useful quantities of water could not be moved by gravity flow from the Burdekin to the Flinders or Thomson Rivers. He showed that Bradfield had over-estimated the quantities of water available from the Tully, Herbert, and Burdekin Rivers. Nimmo also presented summarised costs for the inter-basin transfer components of Bradfield's scheme which he put at some 25 to 30 times greater per unit of water than costs in 1947 for delivery of 'irrigation water for fodder production in Victoria and New South Wales'. Nimmo also drew attention to, but did not estimate, 'the annual charge on a costly distributing system' to get water from the terminal inland storages to the farm users.

Since 1947, the State has undertaken investigations of various segments embodied in Bradfield's proposals.

An investigation of the hydro-electric potential of the Tully River resulted in the development in 1950 of an initial stage of power development using storage created by Koombooloomba Dam on the Upper Tully above the Tully Falls. Tailwater from this power development proceeds downstream to the sea and no further stages of development have been undertaken.

In May 1962 a comprehensive investigation of the development of the Herbert River for power generation was completed. Concurrently with these investigations, the feasibility of diversion of waters from the Herbert River to the Upper Burdekin as envisaged by Bradfield was



examined and shown to be physically feasible. No development of the Herbert River resulted from these investigations.

In January 1977 the joint Commonwealth-State Burdekin Project Committee investigated viable storage sites on the Burdekin Basin including the Hell's Gates Dam site and examined the possibilities for future combined operation of a dam at Burdekin Falls supplemented by a further dam at Hell's Gates.

A review of the total Bradfield scheme was undertaken by the State in 1982. The review was of a very preliminary nature but showed that the transfer of water from the Tully, Herbert, and Burdekin Rivers is 'physically possible but only tenable if high costs are acceptable'. Many of the details of Bradfield's original scheme would have to be modified in the light of greater information now available. The review also estimated that the volume of water that could be available west of the Great Divide was about one-sixth of that estimated by Bradfield.

The Queensland Government is continuing investigations into the concept to determine ways and means by which the economies of the scheme may be improved by a reduction in cost or improvement in benefits. These investigations include a re-assessment of water available for diversion using multi-storage analysis techniques, optimising transfer routes and methods for movement of the water between the catchments, development of water resources west of the Great Divide, agronomic aspects of the proposals, and preliminary costing of the various features of the concept.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Agricultural Land Use and Selected Inputs (7411.3) (*annual*)

Other Publications

Annual reports of the Queensland Land Administration Commission, Department of Mines, Department of Primary Industries, and Commissioner of Water Resources.

Chapter 6

POPULATION

1 GROWTH OF POPULATION

At 31 December 1856 there were 18,544 persons in Queensland, then a portion of the Colony of New South Wales; and in 1859, the year of separation, the population was 23,520.

The estimated resident population at the most recent Census, 30 June 1981, was 2,345,200.

Population at Censuses

The first Census taken in Queensland was on 7 April 1861 when the population was 30,059 (18,121 males, 11,938 females). Later Censuses were conducted by the Colonial Government up to 1901, and thereafter by the Commonwealth Government.

At the 1871 Census the population of Queensland was 120,104; at 1881, 213,525; at 1891, 393,718; at 1901, 498,129; at 1911, 605,813; at 1921, 755,972; at 1933, 947,534; and at 1947, 1,106,415. Details of later Censuses are shown in the table below.

The population of Queensland in 1859 was the second smallest of the six colonies, Western Australia's being the smallest. In 1867 it exceeded that of Tasmania, and in 1885 that of South Australia, and since that date it has retained third place. According to the Censuses taken by the several colonies in 1881, the population of Queensland was 9.5 per cent of the Australian total; this figure was 15.7 per cent at the 1981 Census.

The next table shows the population of all States for Censuses from 1954 to 1981. Populations at Censuses prior to 1966 exclude full-blood Aborigines.

CENSUS COUNTS OF POPULATION (a)

State or Territory	1954	1961	1966	1971	1976	1981
New South Wales	3,423,529	3,917,013	4,237,901	4,601,180	r 4,777,102	5,126,217
Victoria	2,452,341	2,930,113	3,220,217	3,502,351	r 3,646,975	3,832,443
Queensland	1,318,259	1,518,828	1,674,324	1,827,065	2,037,197	2,295,123
South Australia	797,094	969,340	1,094,984	1,173,707	r 1,244,755	1,285,033
Western Australia	639,771	736,629	848,100	1,030,469	r 1,144,858	1,273,624
Tasmania	308,752	350,340	371,436	390,413	r 402,868	418,957
Northern Territory	16,469	27,095	56,504	86,390	97,090	123,324
Australian Capital Territory	30,315	58,828	96,032	144,063	r 197,623	221,609
Australia	8,986,530	10,508,186	11,599,498	12,755,638	r 13,548,468	14,576,330

(a) Excluding full-blood Aborigines prior to 1966.

Estimated Resident Population

The next table shows the estimated resident population of Queensland at 30 June for the years 1976 to 1982. The mean populations for the calendar years and for the financial years are given in separate columns, as they are frequently required for calculations of rates per head.

The estimated resident populations at 30 June 1976 and 1981 were derived by:

- tabulating Census Counts (actual location basis) to obtain counts on the basis of usual residence,
- adjusting the Census Counts (place of usual residence) for Census under-enumeration, and
- adding to the adjusted Census Counts (place of usual residence) the number of Australian residents estimated to have been temporarily overseas at the time of the Census.

An Australian resident is regarded as being temporarily overseas if his intended, or actual, length of stay is less than one year.

The change to *estimated resident population* for the official population series was made following the 1981 Census. Until 1966 the official estimates were based on Census Counts plus natural increase and estimates of net migration. From 1966 it was recognised that short-term internal movements could not be estimated satisfactorily and intercensal estimates thereafter included only movements involving a change in place of residence.

From September 1976, a further change excluded short-term overseas movements because of the large growth in the number, the quarter to quarter fluctuations in the level, and the increasing difficulty in estimating the actual usual residence in Australia of the persons involved.

When the basis for the 1976 to 1981 intercensal estimates had to be decided, neither classification by place of usual residence nor data on Australians temporarily overseas were available from the 1976 Census. Consequently, the estimates were made on a mixed conceptual basis. The Census Count was according to place of location on Census night whereas quarterly changes were estimated according to place of usual residence. With the 1981 Census, place of usual residence was included in the preliminary tabulations and analyses of records of Australians temporarily overseas were undertaken.

ESTIMATED RESIDENT POPULATION, QUEENSLAND

Year	At 30 June			Mean for year ended 30 June	Mean for year ended 31 December
	Males	Females	Persons		
1976.. ..	1,053,500	1,038,800	2,092,400	2,072,000	r 2,091,700
1977.. ..	1,071,300	1,058,500	2,129,800	2,110,700	2,130,200
1978.. ..	1,091,600	1,080,500	2,172,000	2,151,300	2,172,300
1979.. ..	1,112,800	1,102,000	2,214,800	2,192,800	2,215,300
1980.. ..	1,138,300	1,127,600	2,265,900	2,239,600	2,267,600
1981.. ..	1,178,400	1,166,800	2,345,200	2,303,200	2,344,600
1982.. ..	1,216,100	1,203,500	2,419,600	2,384,300	p 2,419,800

The estimated resident populations of all States and Territories at 30 June for the years 1977 to 1982 are shown below.

ESTIMATED RESIDENT POPULATION

State or Territory	Estimated resident population at 30 June					
	1977	1978	1979	1980	1981	1982
New South Wales	5,001,900	5,053,800	5,111,100	5,171,500	5,234,900	5,307,900
Victoria	3,837,400	3,863,800	3,886,400	3,914,300	3,946,900	3,994,100
Queensland	2,129,800	2,172,000	2,214,800	2,265,900	2,345,200	2,419,600
South Australia	1,286,100	1,296,200	1,301,100	1,308,400	1,318,800	1,328,700
Western Australia	1,204,400	1,227,900	1,246,600	1,269,100	1,300,100	1,336,900
Tasmania	415,000	417,600	420,800	423,600	427,200	429,800
Northern Territory	103,900	110,000	114,100	118,200	122,600	129,400
Australian Capital Territory	213,700	218,000	220,800	224,300	227,600	231,900
Australia	14,192,200	14,359,300	14,515,700	14,695,400	14,923,300	15,178,400

During the period 1977 to 1982 the estimated resident population of Queensland increased by 13.6 per cent. Percentage increases in other States and Territories were as follows: Northern Territory, 24.5; Western Australia, 11.0; Australian Capital Territory, 8.5; New South Wales, 6.1; Victoria, 4.1; Tasmania, 3.6; and South Australia, 3.3.

Overseas Migration

At the end of World War II, Australia embarked on a program of planned, large-scale immigration in order to develop its resources by strengthening and diversifying the economy. Although immigration policy continues to provide for specific national needs, emphasis is given to family reunion and sponsored migration.

The next table shows the permanent movement of population recorded in the six years to 1982. It shows *settlers* who declared on arrival in Australia that they intended to settle permanently, and nominated Queensland as being the State of their intended future residence. It also shows departures of Queensland residents permanently departing Australia, and *former settlers*, i.e. persons who stated on departure that they had come to Australia intending to settle.

PERMANENT MOVEMENT OF POPULATION, QUEENSLAND

Year	Settlers arriving		Departures		Net gain	
	Assisted	Total	Former settlers (a)	Total	New settlers (a)	Total
1977 ..	1,435	6,517	1,588	2,787	4,929	3,730
1978 ..	1,331	6,866	1,628	3,088	5,238	3,778
1979 ..	1,630	9,073	1,637	3,027	7,436	6,046
1980 ..	1,776	12,499	1,618	2,968	10,881	9,531
1981 ..	2,532	17,318	1,987	3,223	15,331	14,095
1982 ..	1,648	15,939	2,649	4,193	13,290	11,746

(a) See text above.

At the 1947 Census, 114,237 persons in Queensland, or 10.3 per cent of the population, were recorded as having been born outside Australia. At the 1976 and 1981 Censuses the numbers were 266,082 (13.1 per cent) and 330,172 (14.4 per cent), respectively. The corresponding proportions for the whole of Australia were 9.8 per cent in 1947, 20.4 per cent in 1976, and 20.6 per cent in 1981.

Overseas Short-term Movement

Population movement in the short term, i.e. for periods of less than 12 months, of Queensland residents going abroad, and overseas visitors arriving with the intention of staying in Queensland, is shown in the next table according to the purpose of journey.

The figures for short-term movement in the population are estimates based on a sample and subject to sampling errors. The difference between the figures shown and those that would be obtained from a full enumeration, the standard error of the estimate, is relatively small.

SHORT-TERM MOVEMENT OF POPULATION (a), QUEENSLAND

Purpose of journey	Overseas visitors arriving		Queensland residents departing	
	1981	1982	1981	1982
In transit	5,890	6,567	..	..
Convention, employment, or business	13,775	14,441	20,493	22,248
Holiday or accompanying business traveller ..	61,576	61,684	87,305	94,224
Visiting relatives	40,951	42,270	27,186	30,981
Other and not stated	8,782	11,354	7,637	7,973
Total	130,973	136,317	142,621	155,425

(a) See text above.

The durations of stay of overseas visitors to Australia and of those who spent most of their time in Queensland are given in the next table.

OVERSEAS VISITORS DEPARTING AUSTRALIA (a) ACCORDING TO LENGTH OF STAY

Length of stay	Australia		Those spending most time in Queensland	
	1981	1982	1981	1982
Under 1 week	194,625	204,527	14,625	18,045
1 week and under 2 weeks	182,894	171,212	24,510	22,718
2 weeks and under 3 weeks	135,005	126,037	28,588	27,390
3 weeks and under 1 month	88,424	89,982	19,365	19,554
1 month and under 2 months	146,078	158,840	23,301	26,032
2 months and under 3 months	50,826	55,921	8,388	8,700
3 months and under 6 months	57,700	63,267	8,130	8,711
6 months and under 9 months	19,539	23,782	2,672	3,475
9 months and under 12 months	15,765	19,651	2,226	2,764
Not stated etc.	9,519	8,239	667	767
Total	900,376	921,459	132,470	138,157

(a) See text above.

2 AGE DISTRIBUTION OF POPULATION

The estimated resident population by age group and sex for 1981 and 1982 is shown in the next table.

AGE DISTRIBUTION OF POPULATION (a), QUEENSLAND, 30 JUNE

Age group	1981			1982		
	Males	Females	Persons	Males	Females	Persons
0- 4	95,532	90,739	186,271	98,856	93,513	192,369
5- 9	106,840	102,339	209,179	105,935	101,383	207,318
10-14	109,466	105,160	214,626	114,843	110,425	225,268
15-19	105,571	103,149	208,720	106,248	103,173	209,421
20-24	106,414	101,358	207,772	110,533	105,515	216,048
25-29	97,755	92,711	190,466	101,365	96,414	197,779
30-34	96,035	92,188	188,223	98,284	94,262	192,546
35-39	79,005	75,481	154,486	86,362	82,709	169,071
40-44	65,567	61,500	127,067	69,449	65,157	134,606
45-49	56,598	53,600	110,198	58,377	55,164	113,541
50-54	58,314	56,266	114,580	58,643	56,554	115,197
55-59	55,820	54,777	110,597	56,423	55,071	111,494
60-64	46,412	50,120	96,532	48,597	51,789	100,386
65-69	39,750	43,880	83,630	40,341	45,192	85,533
70 and over	59,368	83,493	142,861	61,837	87,156	148,993
Total	1,178,447	1,166,761	2,345,208	1,216,093	1,203,477	2,419,570
Under 18	373,797	358,831	732,628	382,311	365,811	748,122
18-64	705,532	680,557	1,386,089	731,604	705,318	1,436,922
65 and over	99,118	127,373	226,491	102,178	132,348	234,526

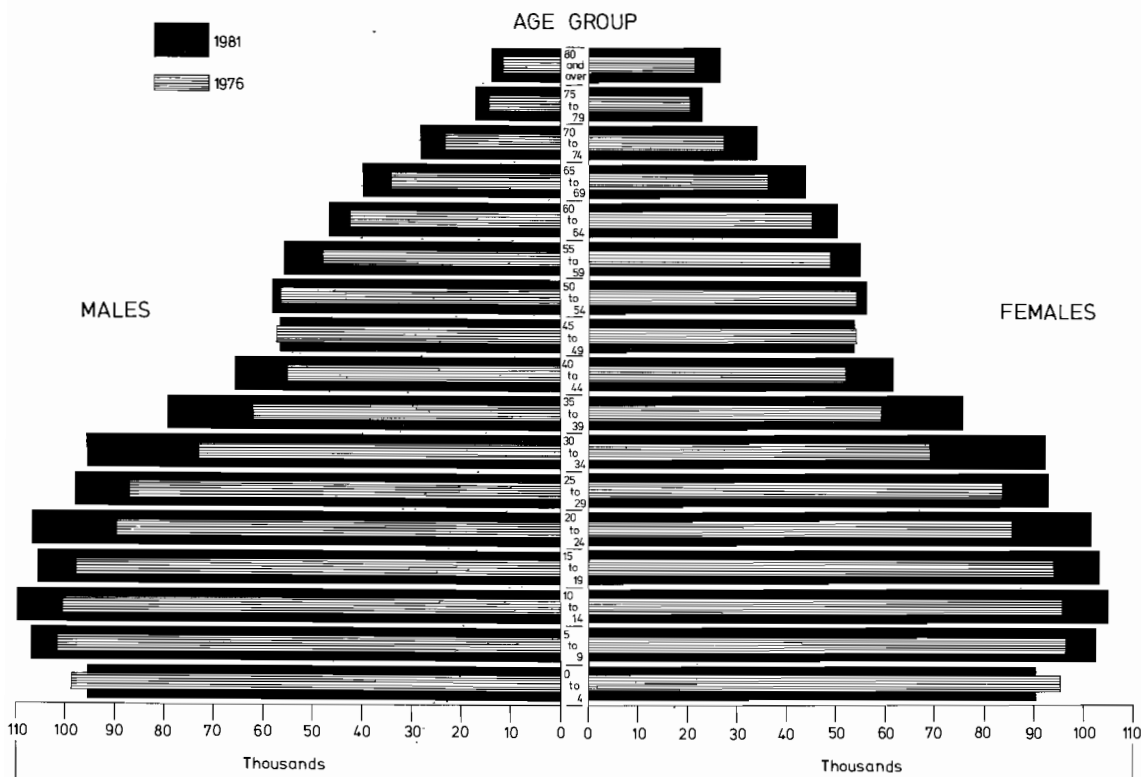
(a) Age distributions are shown to unit level but are estimates only.

The diagram on page 115 compares the estimated age distribution at the 1981 Census with that at the 1976 Census.

3 GEOGRAPHICAL DISTRIBUTION OF POPULATION

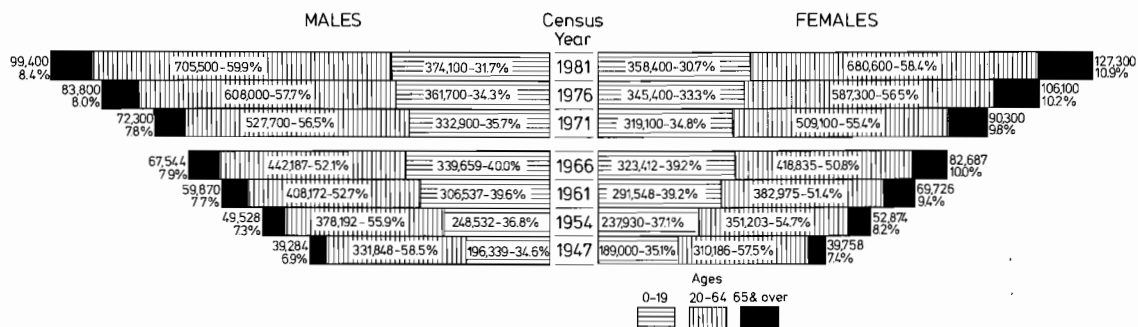
Most of the population of Queensland is distributed in the coastal areas east of the Great Dividing Range and is relatively densest within 300 kilometres of Brisbane. The mining industry has contributed to population growth, particularly in central Queensland. Throughout the interior, where industry is almost entirely pastoral, however, population is sparsely distributed.

AGE STRUCTURE OF QUEENSLAND POPULATION



The comparative age grouping at the 1976 and 1981 Censuses is shown in the diagram above. It will be noticed that with the growth of population the length of the black 1981 bars is greater than that of the hatched 1976 bars for all age groups except the 0-4 and 45-49 groups. The 45-49 age group in 1981 includes those born in the years 1932 to 1936 when the effects of the depression and the world-wide lowering of the birth rate were severely felt.

The diagram below illustrates the changing sizes and proportions of age groups over the last six Census periods. The age groups approximately represent (i) the childhood and student ages, (ii) the working ages, and (iii) the retired ages. In interpreting the diagram, note should be taken of the fact that from 1971 the estimated resident population is depicted, while the data for earlier years represent the count of the population on the basis of location on Census night.



Local Authorities and Suburbs

The next table shows the areas and populations of Local Authorities grouped into Statistical Divisions. Populations are those recorded at the 1976 and 1981 Censuses and the estimated resident population at 30 June 1981 and 1982.

In 1981, for the first time in Queensland, school semester holidays coincided with the taking of the Census. As a result, the number of people absent from their usual place of residence was significantly higher than in 1976. The effect of this movement on Census Counts (actual location basis) may be significant in some centres, e.g. resort areas, and needs to be kept in mind when comparing counts over time.

Boundaries of Brisbane Suburbs for the 1981 Census differ marginally from those delimited by the Place Names Board, in that they generally follow the middle of the street rather than rear property alignments. Where other boundary changes have occurred, figures have been partly estimated to agree with those defined at the time of the latest estimate.

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION

Cities are shown as—IPSWICH

Towns are shown as—DALBY

Suburbs and Shires are shown as—ALBERT

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982

BRISBANE STATISTICAL DIVISION*City of Brisbane*

Acacia Ridge	9.3	8,650	7,573	8,110	} n.y.a.
Albion	1.5	2,728	2,322	2,500	
Alderley	2.6	5,265	4,695	5,010	
Algeria	4.1	2,493	3,995	4,290	
Annerley	3.0	8,626	8,344	8,870	
Ansfield, Moggill State Forest	14.7	599	728	750	
Archerfield	4.5	913	785	810	
Ascot	2.5	4,606	4,298	4,660	
Ashgrove	5.8	11,423	10,098	11,040	
Aspley	6.1	10,406	10,129	10,830	
Bald Hills	14.2	3,322	4,228	4,510	} n.y.a.
Balmoral	1.2	2,928	2,915	3,140	
Banyo	3.6	5,146	4,892	5,310	
Bardon	5.3	7,704	7,149	7,730	
Bellbowrie	6.0	771	1,477	1,590	
Belmont	12.5	1,295	1,117	1,240	
Berrinba	5.3	323	272	270	
Boondall	11.0	5,044	5,274	5,660	
Bowen Hills	1.6	1,301	923	980	
Bracken Ridge	8.5	7,017	9,319	10,060	
Bridgman Downs	8.6	874	946	1,050	} n.y.a.
Brighton	8.3	10,350	9,076	9,650	
Brookfield, Mount Coot-tha Park	34.2	1,192	1,326	1,570	
Bulimba	2.8	4,288	3,592	3,920	
Burbank	31.0	689	913	950	
Calamvale	6.6	766	718	770	
Camp Hill	4.7	9,961	8,999	9,790	
Cannon Hill	3.9	4,259	4,426	4,670	
Capalaba West	5.5	295	344	360	
Carina	6.2	7,563	8,247	8,790	

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—*continued*

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
City of Brisbane—continued					
Carina Heights	4.7	4,435	4,771	5,030	} <i>n.y.a.</i>
Carseldine	4.5	1,145	2,446	2,650	
Chandler	7.9	1,024	853	940	
Chapel Hill	5.3	4,171	5,796	6,480	
Chelmer	1.8	2,852	2,497	2,750	
Chermside	3.6	7,666	6,892	7,170	
Chermside West	3.4	6,596	6,612	7,010	
City	2.9	3,036	3,511	2,560	
Clayfield	3.0	9,525	8,621	9,370	
Cooper's Plains	4.1	5,017	4,492	4,760	
Coorparoo	5.4	13,125	12,008	12,910	
Corinda	3.0	4,132	4,094	4,500	
Cribb Island	6.6	938	—	—	
Darra	6.0	3,815	3,835	4,000	
Deagon	2.6	3,778	3,656	3,790	
Doolandella	9.4	310	372	390	
Drewvale	4.4	113	49	60	
Durack	4.3	1,651	2,492	2,630	
Dutton Park	1.0	2,320	1,972	1,860	
Eagle Farm	13.2	41	13	20	
East Brisbane	2.1	5,506	4,853	5,170	} <i>n.y.a.</i>
Eight Mile Plains	6.4	1,767	3,334	3,530	
Ellen Grove	3.2	467	474	490	
Enoggera, Enoggera Military Camp	9.1	6,668	6,216	6,800	
Everton Park	4.2	8,370	7,721	8,470	
Fairfield	1.3	2,404	2,187	2,320	
Ferny Grove	3.8	824	2,704	2,950	
Fig Tree Pocket	4.8	1,649	1,928	2,170	
Fitzgibbon	3.1	16	18	20	
Fortitude Valley	1.4	1,378	1,737	1,710	
Geebung	4.1	5,585	4,850	5,290	
Graceville	2.0	3,929	3,514	3,860	
Grange	1.8	3,818	3,482	3,710	
Greenslopes	2.9	7,349	7,219	7,360	
Gumdale	5.7	972	1,055	1,180	
Hamilton	2.2	4,431	4,062	4,320	
Hawthorne	1.5	3,955	3,654	3,900	
Heathwood	5.3	11	16	20	
Hemmant	6.2	1,372	1,558	1,640	
Hendra	2.4	3,914	3,807	4,000	
Herston	1.7	3,306	3,109	2,410	} <i>n.y.a.</i>
Highgate Hill	1.3	5,216	5,064	5,350	
Holland Park	3.1	7,708	7,363	7,970	
Holland Park West	2.6	6,157	5,270	5,800	
Inala	7.7	20,037	17,383	18,370	
Indooroopilly	8.3	8,534	7,959	8,940	
Jamboree Heights, Sumner	3.2	2,095	2,916	3,180	
Jindalee	3.3	5,166	5,663	6,180	
Kangaroo Point	1.6	3,831	4,230	4,070	
Karawatha	5.6	132	155	150	
Kedron	5.3	11,660	11,365	11,940	
Kelvin Grove	1.7	3,804	3,685	3,920	

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—continued

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
City of Brisbane—continued					
Kenmore	5.7	8,630	8,011	9,270	n.y.a.
Kenmore Hills	4.3	760	771	870	
Keperra	5.7	6,628	6,192	6,790	
Kuraby	4.6	949	1,027	1,090	
Larapinta (see Parkinson) .. .. .	..	..	..	..
Lota	4.0	2,453	2,519	2,710	
Lower Nudgee	15.3	238	145	140	
Lutwyche	0.9	2,830	2,628	2,760	
Lytton	14.1	54	58	70	
McDowall	4.4	1,524	2,631	2,890	
MacGregor	2.8	5,380	5,442	5,910	
Mackenzie	6.1	180	127	140	
Manly	2.6	3,861	3,535	3,760	
Manly West	5.1	6,427	7,060	7,520	
Mansfield	4.1	7,311	7,556	8,170	
Middle Park	1.4	—	471	510	
Milton	1.2	1,928	1,894	2,010	
Mitchelton	3.8	6,115	5,810	6,270	
Moggill	11.3	707	737	860	
Moorooka	4.3	9,639	8,740	9,350	
Moreton Island (c)	190.0	112	549	170	
Morningside	6.0	7,495	6,836	7,260	
Mount Gravatt	2.7	3,417	3,144	3,400	
Mount Gravatt East	4.7	10,201	9,149	9,980	
Mount Ommaney	2.0	268	565	620	
Murarie	9.4	2,499	2,367	2,540	
Nathan	5.3	990	1,358	1,380	
New Farm	2.6	9,641	9,220	9,640	
Newmarket	1.8	3,955	3,520	3,800	
Newstead	1.8	1,498	1,103	1,120	
Norman Park	3.1	6,715	6,417	6,900	
Northgate	2.4	4,126	3,643	3,880	
Nudgee	3.0	2,147	1,715	1,980	
Nudgee Beach	9.0	210	330	340	
Nundah	3.8	7,590	7,358	7,850	
Oxley	7.1	6,633	6,084	6,610	
Paddington	2.5	7,852	6,901	7,380	
Pallara	8.0	533	602	630	
Parkinson, Larapinta	14.4	73	88	100	
Pinjarra Hills	6.1	604	460	530	
Pinkenba	28.9	606	432	470	
Pullenvale	23.8	858	1,039	1,170	
Ransome	5.4	250	300	300	
Red Hill	1.6	5,033	4,749	5,080	
Richlands	5.7	496	602	680	
Riverhills	2.5	555	1,355	1,480	
Robertson	1.7	945	2,434	2,600	
Rochedale	14.7	1,063	1,063	1,300	
Rocklea	9.0	1,892	1,717	1,820	
Runcorn	6.7	2,375	3,533	3,720	
St Lucia	4.1	5,812	6,075	7,320	
Salisbury	4.6	6,537	5,824	6,310	

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—*continued*

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
City of Brisbane—continued					
Sandgate	5.7	7,204	6,776	7,300	}
Seventeen Mile Rocks	5.3	295	1,089	1,100	
Sherwood	2.3	3,895	4,131	4,470	
South Brisbane	2.4	4,178	3,364	3,160	
Spring Hill	1.3	3,910	3,583	3,010	
Stafford	3.4	7,303	6,634	7,150	
Stafford Heights	3.0	8,101	7,097	7,830	
Stretton	5.3	56	196	210	
Summer (see Jamboree Heights) .. .. .	..	..	..	..
Sunnybank	4.7	7,473	7,494	8,120	
Sunnybank Hills	6.0	4,365	7,352	7,940	
Taigum	2.9	769	1,148	1,210	
Taringa	2.1	4,735	4,808	5,250	
Tarragindi	4.8	11,058	9,817	10,600	
The Gap, Enoggera State Forest	50.0	9,938	11,844	13,340	
Tingalpa	10.4	3,663	4,295	4,540	}
Toowong	6.0	11,713	11,083	12,080	
Underwood (part)	2.6	258	128	160	
Upper Brookfield	32.2	396	421	460	
Upper Kedron	9.2	93	128	130	
Upper Mount Gravatt	4.3	9,296	8,414	9,170	
Virginia	3.1	2,457	2,191	2,270	
Wacol	17.6	2,814	3,474	3,410	
Wakerley	4.7	440	525	540	
Wavell Heights	3.5	9,496	8,650	9,340	
West End	2.3	6,278	6,343	6,770	
Westlake	2.3	218	668	710	
Willawong	8.0	226	282	300	
Wilston	1.4	3,409	3,434	3,650	
Windsor	2.8	6,363	6,119	6,360	
Wishart	5.8	4,108	5,920	6,210	}
Woolloongabba	2.5	5,872	5,523	5,120	
Woolloowin	2.0	5,529	5,518	5,820	
Wynnum	7.1	11,497	10,794	11,650	
Wynnum West	5.8	7,769	7,651	8,080	
Yeerongpilly	3.0	1,969	1,979	2,120	
Yeronga	3.4	4,813	4,572	4,950	
Zillmere	3.7	7,670	7,394	7,760	
TOTAL CITY OF BRISBANE	(d) 1,220	696,740	689,378	736,660	743,100

Other Brisbane Statistical Division

Albert (part)	71	r 5,515	11,027	11,640	13,050
Beaudesert (part)	95	r 1,543	2,711	2,910	3,250
Caboolture (part)	201	11,075	18,239	19,400	21,200
IPSWICH	122	69,242	68,297	73,020	73,600
LOGAN	241	r 55,181	82,606	87,370	94,420
Moreton (part)	200	7,884	14,937	16,070	18,200
Pine Rivers (part)	357	43,953	56,582	61,210	64,720
REDCLIFFE	35	39,073	42,223	44,030	44,980
Redland	537	27,539	42,527	43,890	47,660
TOTAL BRISBANE STAT. DIVISION	(c) 3,080	957,745	1,028,527	1,096,200	1,124,180

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—*continued*

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
Moreton Division					
Albert (part)	1,203	18,753	43,843	44,390	52,550
Beaudesert (part)	2,763	11,242	15,322	15,320	16,410
Boonah	1,476	5,378	5,263	5,550	5,580
Caboolture (part)	1,013	8,329	14,405	12,980	14,170
Esk	3,846	5,970	8,090	8,270	8,800
Gatton	1,576	8,689	9,675	10,420	10,650
GOLD COAST	122	87,510	117,824	104,910	110,920
Kilcoy	1,437	2,223	2,186	2,350	2,380
Laidley	694	4,635	5,380	5,740	5,880
Landsborough	1,102	16,982	29,705	26,600	29,600
Maroochy	1,153	35,266	53,428	50,940	55,250
Moreton (part)	1,613	7,019	8,644	8,920	9,420
Noosa	875	10,425	17,071	14,640	16,100
Pine Rivers (part)	410	1,239	1,607	1,640	1,730
<i>Total</i>	<i>19,280</i>	<i>223,660</i>	<i>332,443</i>	<i>312,660</i>	<i>339,440</i>
Wide Bay-Burnett Division					
Biggenden	1,321	1,532	1,411	1,490	1,470
BUNDABERG	45	30,456	30,937	32,180	32,550
Eidsvold	4,789	1,231	1,256	1,310	1,300
Gayndah	2,707	2,814	2,859	3,020	3,060
Gooburrum	1,304	5,227	5,261	5,200	5,240
GYMPIE	18	11,205	10,768	11,340	11,370
HERVEY BAY	2,393	10,304	16,402	12,250	14,900
Isis	1,677	3,926	4,023	3,880	3,870
Kilkivan	3,250	2,651	2,500	2,600	2,600
Kingaroy	2,422	7,801	7,939	8,620	8,730
Kolan	2,655	2,684	2,358	2,490	2,480
MARYBOROUGH	1,115	21,527	21,530	22,250	22,400
Miriam Vale	3,709	1,476	1,971	1,630	1,650
Monto	4,283	3,228	3,299	3,400	3,430
Mundubbera	4,185	2,395	2,481	2,460	2,500
Murgon	699	4,556	4,333	4,650	4,640
Nanango	1,735	2,961	4,149	4,120	4,400
Perry	2,357	304	309	330	330
Tiaro	2,211	1,875	2,066	2,100	2,140
Widgee	2,940	7,985	11,317	10,450	11,100
Wondai	3,574	3,329	3,456	3,690	3,740
Woocoo	2,025	3,412	4,456	3,900	2,130
Woongarra	731	8,791	9,865	9,750	10,010
<i>Total</i>	<i>52,150</i>	<i>141,670</i>	<i>154,946</i>	<i>153,080</i>	<i>156,040</i>
Darling Downs Division					
Allora	699	1,666	1,679	1,790	1,810
Cambooya	635	1,676	1,894	1,990	2,030
Chinchilla	8,689	5,319	5,387	5,610	5,640
Clifton	865	2,260	2,188	2,370	2,350
Crow's Nest	1,632	3,445	4,125	4,210	4,350
DALBY	49	8,997	8,784	9,470	9,570
Glengallan	1,735	3,491	3,611	3,560	3,560
GOONDIWINDI	16	3,741	3,576	3,760	3,780
Inglewood	5,862	3,208	3,026	3,130	3,080
Jondaryan	1,904	6,576	7,832	8,270	8,530
Millmerran	4,507	3,309	3,047	3,180	3,120
Murilla	6,045	3,137	3,007	3,110	3,080
Pittsworth	1,101	3,714	3,605	3,880	3,880
Rosalie	2,189	4,728	5,216	5,430	5,530

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—*continued*

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
Darling Downs Division—continued					
Rosenthal	1,968	1,548	1,581	1,720	1,760
Stanthorpe	2,681	8,709	8,576	9,420	9,470
Tara	11,176	3,098	3,116	3,330	3,370
Taroom	18,641	3,103	3,237	3,290	3,310
TOOWOOMBA	118	66,436	66,698	73,040	74,080
Waggamba	13,835	2,560	2,732	2,760	2,750
Wambo	5,691	5,423	5,511	5,840	5,860
WARWICK	26	9,169	8,853	9,490	9,530
Total	90,060	155,313	157,281	168,640	170,440
South-West Division					
Balonne	31,119	4,580	4,678	4,900	4,940
Bendemere	3,941	1,201	1,116	1,180	1,170
Booringa	27,793	2,300	2,272	2,300	2,280
Bulloo	73,620	521	492	490	490
Bungil	13,302	2,111	2,086	2,280	2,290
Murweh	43,905	5,585	5,338	5,610	5,560
Paroo	47,617	3,021	2,691	2,700	2,610
Quilpie	67,482	1,440	1,430	1,400	1,400
ROMA	78	5,898	5,706	6,020	6,040
Warroo	13,660	1,219	1,304	1,310	1,310
Total	322,520	27,876	27,113	28,180	28,090
Fitzroy Division					
Banana	15,729	14,169	14,519	15,260	15,470
Baahinia	24,558	2,372	3,086	2,580	2,640
Calliope	5,875	5,055	8,700	8,150	8,910
Duaranga	17,153	7,693	8,329	9,140	9,650
Emerald	10,230	6,024	8,435	7,940	8,600
Fitzroy	4,999	3,441	4,645	4,920	5,240
GLADSTONE	128	18,948	22,712	23,850	24,770
Jericho	21,717	1,220	1,177	1,240	1,220
Livingstone	12,729	11,634	15,711	13,010	13,470
Mount Morgan	505	3,467	3,136	3,320	3,240
Peak Downs	8,096	1,239	1,958	1,890	2,100
ROCKHAMPTON	161	51,133	52,383	54,240	54,620
Total	121,880	126,395	144,791	145,520	149,930
Central-West Division					
Aramac	23,232	1,059	1,082	1,080	1,070
Barcaldine	8,430	1,780	1,783	1,860	1,860
Barcoo	61,901	657	711	630	620
Blackall	16,304	2,160	2,223	2,210	2,210
Boulia	61,176	635	660	630	620
Diamantina	94,690	255	366	300	310
Ilfracombe	6,566	428	460	400	390
Isisford	10,528	431	605	480	490
Longreach	23,517	4,052	3,846	4,060	4,070
Tambo	10,308	668	762	750	770
Winton	53,820	1,938	1,995	1,930	1,940
Total	370,470	14,063	14,493	14,320	14,350
Mackay Division					
Belyando	30,078	7,210	7,700	8,490	9,050
Broadsound	18,307	3,379	6,908	7,100	8,220

LOCAL AUTHORITIES AND SUBURBS: AREA AND POPULATION—*continued*

Local Authority Area or Suburb	Area in square kilometres at 30 June 1982 (a)	Census Count at 30 June		Estimated resident population at 30 June	
		1976	1981 (b)	1981	1982
Mackay Division—continued					
MACKAY	34	20,224	20,664	20,990	22,600
Mirani	3,292	4,889	4,739	4,850	4,840
Nebo	10,033	800	914	900	950
Pioneer	2,764	26,938	33,732	32,900	32,650
Proserpine	2,644	7,746	10,833	7,770	8,080
Sarina	1,327	5,852	6,922	6,770	6,940
<i>Total</i>	<i>68,480</i>	<i>77,038</i>	<i>92,412</i>	<i>89,760</i>	<i>93,330</i>
Northern Division					
Bowen	21,085	11,292	13,645	12,870	13,800
Burdekin	4,914	18,415	18,477	18,600	18,530
CHARTERS TOWERS	41	7,914	6,823	7,600	7,650
Dalrymple	67,782	r 2,586	3,338	3,270	3,470
Hinchinbrook	2,707	13,974	13,683	13,730	13,680
Thuringowa	4,121	10,914	17,728	18,170	20,030
TOWNSVILLE	376	80,365	81,172	82,250	82,450
<i>Total</i>	<i>101,030</i>	<i>145,460</i>	<i>154,866</i>	<i>156,500</i>	<i>159,610</i>
Far North Division					
Atherton	620	6,240	7,501	7,480	7,720
Aurukun	7,500	620	791	840	860
CAIRNS	56	34,857	39,096	36,700	37,450
Cardwell	2,901	6,478	7,853	6,970	7,180
Cook (e)	115,341	5,508	6,889	6,990	7,220
Croydon	28,386	222	255	250	260
Douglas	2,386	4,746	5,957	4,850	4,960
Eacham	1,142	3,433	4,137	4,150	4,310
Etheridge	39,917	940	1,010	900	900
Herberton	9,527	3,679	3,688	3,840	3,930
Johnstone	1,633	16,776	17,438	16,900	16,920
Mareeba	52,585	12,136	14,003	14,340	14,670
Mulgrave	1,737	23,025	31,335	29,580	31,210
Torres	2,796	6,001	6,131	6,380	6,480
<i>Total</i>	<i>266,530</i>	<i>124,661</i>	<i>146,084</i>	<i>140,170</i>	<i>144,070</i>
North-West Division					
Burke	41,802	1,137	1,328	1,320	1,350
Carpentaria	68,272	2,809	3,273	3,110	3,160
Cloncurry	49,969	4,036	3,651	3,790	3,800
Flinders	41,621	2,875	2,740	2,720	2,700
McKinlay	40,728	1,468	1,477	1,490	1,470
Mornington	1,192	402	773	830	840
MOUNT ISA	41,225	r 26,496	24,390	25,570	25,450
Richmond	26,936	1,442	1,383	1,360	1,350
Unincorporated islands	21	353	675	..	..
<i>Total</i>	<i>311,770</i>	<i>r 41,018</i>	<i>39,690</i>	<i>40,170</i>	<i>40,120</i>
Migratory (f) .. .. .	..	2,298	2,477	..	..
TOTAL STATE	1,727,000	2,037,197	2,295,123	2,345,200	2,419,600

(a) Source: Queensland Department of Mapping and Surveying. Areas have been rounded in the following manner: Suburbs within the Brisbane Statistical Division, to the nearest one-tenth of a square kilometre; Local Authority Areas and unincorporated islands, to the nearest square kilometre; Statistical Divisions, to the nearest 10 square kilometres; and the State total, to the nearest 1,000 square kilometres. (b) Refer textual note on page 116.

(c) Including Bishop, Fisherman, Green, Mud, St Helena, and Whyte Islands. (d) Including foreshores and the Brisbane River. (e) Including Weipa Town. (f) Including all persons, not elsewhere enumerated, who spent Census night on ships, long-distance trains, motor-coaches, or aircraft.

Urban Centres

Population clusters of 1,000 or more, and known holiday resorts of less population containing 250 or more dwellings, of which at least 100 were occupied at the Census, were designated as 'urban centres'.

CENSUS COUNTS (a), URBAN CENTRES, QUEENSLAND

Urban centre	1966	1971	1976	1981	Urban centre	1966	1971	1976	1981
Airlie Beach	n.a.	n.a.	971	1,705	Ingham	5,375	5,787	5,868	5,598
Amity Point	n.a.	n.a.	257	377	Innisfail	7,449	7,471	7,933	7,933
Atherton	2,882	3,089	3,611	4,196	Kawana Waters	n.a.	n.a.	n.a.	5,241
Ayr	8,712	8,270	8,606	8,787	Kilcoy	1,150	1,148	1,289	1,257
Babinda	1,595	1,560	1,453	1,389	Kingaroy	5,080	4,925	5,088	5,134
Barcaldine	1,796	1,464	1,443	1,432	Laidley	1,515	1,524	1,593	1,807
Bargara	582	883	1,716	1,718	Longreach	3,873	3,455	3,354	2,971
Beachmere	308	396	612	1,039	Mackay	24,584	28,554	31,522	35,361
Beaudesert	3,309	3,643	4,029	3,780	Malanda	n.a.	n.a.	805	986
Beenleigh	2,026	2,458	4,216	7,839	Mareeba	4,898	5,160	5,776	6,309
Biloela	3,537	4,034	4,586	4,643	Maroochydore- Mooloolaba	4,107	6,374	10,283	17,460
Blackall	2,016	1,755	1,618	1,609	Maryborough	20,404	19,916	20,670	20,111
Blackwater	n.a.	1,984	4,638	5,434	Miles	1,485	1,438	1,367	1,262
Bongaree	729	1,101	2,302	4,789	Millmerran	1,122	1,222	1,249	1,107
Boonah	2,041	1,913	2,003	1,874	Mitchell	1,733	1,443	1,283	1,171
Bowen	5,159	5,880	6,707	7,663	Monto	1,813	1,565	1,557	1,397
Brisbane	716,402	818,423	892,987	942,836	Moranbah	n.a.	1,050	4,053	4,362
Browns Plains	n.a.	n.a.	1,293	2,406	Mossman	1,638	1,594	1,598	1,614
Bucasia	n.a.	610	1,228	1,356	Mount Isa	16,952	25,497	25,377	23,679
Buderim	1,063	1,763	2,863	4,016	Mount Morgan	4,080	3,741	3,246	2,974
Bundaberg	24,334	26,516	31,189	32,560	Moura	1,093	1,902	2,694	2,871
Burnett Heads	n.a.	n.a.	587	1,037	Munduberra	1,103	1,084	1,059	1,102
Burpengary	n.a.	n.a.	n.a.	1,627	Murgon	2,264	2,478	2,407	2,327
Burrum Heads	n.a.	n.a.	378	896	Nambour	6,220	6,807	7,435	7,965
Caboolture	2,543	3,248	4,641	6,451	Nanango	1,300	1,187	1,111	1,830
Cairns	28,719	32,747	39,305	48,557	Nerang	n.a.	665	1,465	4,356
Caloundra	3,661	6,150	10,602	16,758	Oakey	1,967	1,985	2,418	2,857
Cannonvale	n.a.	n.a.	629	1,216	Pallarenda	n.a.	n.a.	1,016	928
Cardwell	n.a.	n.a.	933	1,249	Peregian Beach	n.a.	n.a.	n.a.	1,491
Charleville	4,881	3,948	3,802	3,523	Pittsworth	1,551	1,786	1,730	1,817
Charters Towers	7,755	7,518	7,914	6,823	Point Lookout	n.a.	240	363	758
Childers	1,341	1,392	1,511	1,406	Proserpine	2,952	2,968	3,012	3,058
Chinchilla	3,336	3,013	3,161	3,092	Redland Bay	n.a.	n.a.	916	1,325
Clermont	1,676	1,672	1,644	1,659	Rockhampton	45,412	48,213	50,132	50,146
Clifton Beach	n.a.	n.a.	1,395	1,957	Roma	6,013	5,870	5,898	5,706
Cloncurry	2,242	2,215	2,079	1,961	Rosewood	1,676	1,569	1,702	1,657
Collinsville	1,909	2,147	2,403	2,756	Russell Is.-Macleay Is.	n.a.	248	343	540
Coolumb Beach	204	463	1,183	2,954	St George	2,254	2,176	2,095	2,204
Cooroy	1,043	1,131	1,357	1,429	Sarina	2,422	2,520	2,832	2,815
Crow's Nest	n.a.	n.a.	934	1,037	Stanthorpe	3,641	3,602	3,927	3,966
Cunnamulla	1,992	1,805	1,897	1,627	Tannum Sands	n.a.	n.a.	565	1,217
Dalby	8,863	8,879	8,997	8,784	Tewantin-Noosa	2,728	4,075	5,834	9,965
Deception Bay	704	976	2,078	3,857	Thursday Island	2,655	2,237	2,336	2,283
Dunwich	n.a.	n.a.	931	789	Tin Can Bay	513	615	719	883
Dysart	n.a.	n.a.	1,585	3,257	Toowoomba	52,145	57,578	63,956	63,401
Edmonton-Hambledon	1,231	1,441	1,636	2,103	Townsville	56,930	68,591	78,653	86,112
Emerald	2,197	2,923	3,161	4,628	Trinity Beach	n.a.	n.a.	633	857
Emu Park	n.a.	658	915	1,429	Tully	2,883	2,668	2,793	2,728
Gatton	3,064	3,547	3,986	4,190	Victoria Point	n.a.	n.a.	944	2,648
Gayndah	1,754	1,802	1,643	1,708	Walkerston	673	980	1,140	1,277
Gladstone	12,470	15,574	18,591	22,083	Warwick	10,075	9,303	9,169	8,853
Glenella	n.a.	n.a.	575	1,202	Waterford	n.a.	n.a.	667	1,120
Gold Coast (b)	49,358	69,120	94,014	135,437	Weipa	769	2,199	2,876	2,433
Goondiwindi	3,529	3,695	3,741	3,576	White Rock	n.a.	n.a.	718	1,147
Gordonvale	2,199	2,142	2,103	2,375	Winton	1,676	1,331	1,275	1,259
Gracemere	n.a.	n.a.	292	1,263	Wondai	1,214	1,146	1,118	1,024
Gympie	11,286	11,096	11,205	10,768	Woorim	248	345	721	1,285
Hervey Bay	4,574	6,170	9,150	13,569	Yeppoon	3,420	4,534	5,575	6,447
Holloways Beach	n.a.	236	1,048	1,602	Yorkey's Knob	n.a.	425	1,137	1,915
Home Hill	3,518	3,058	3,330	3,138					
Hughenden	2,069	1,916	1,811	1,657					

(a) Refer textual note on page 116.

(b) Excluding area in New South Wales.

For urban centres with 25,000 or more population all contiguous Census Collection Districts having a population density of 200 or more persons per square kilometre were included. Thus, where an incorporated City or Town contained a large rural component, this was excluded from the urban centre by a boundary drawn from aerial photographs or after field inspection; and, where the urban development extended beyond the City or Town boundary, the extension was regarded as an integral part of the urban centre. Hence populations shown for urban centres may differ from the populations of the incorporated Cities and Towns (Local Authorities).

Centres of less than 25,000 population were delimited subjectively, by inspection of aerial photographs, by field inspection, and/or by consideration of any other information available. All contiguous urban growth has been included together with any close but non-contiguous development which could be clearly regarded as part of the centre.

Brisbane Statistical Division and Statistical Districts

To achieve greater comparability between Capital City populations, a new concept of a Capital City statistical division was introduced at the 1966 Census. It was decided that a boundary should be delimited about each capital to contain the anticipated urban development of the City for a period of 20 to 30 years.

At the same time a concept of statistical district was adopted to encompass the spread of urbanisation around urban areas of 100,000 or more population. In 1976, the definition of statistical districts was amended, and around urban centres of 25,000 or more population a further boundary was defined, after consultation with planners, to contain the anticipated development of the urban centre and associated urban centres for a period of at least 20 years. Such a boundary delimits an area which is now, or is expected to be, socially and economically oriented towards the urban centre. This fixed boundary (as distinct from the urban boundary which is moving) delimits an area which, for general statistical purposes, is free from the practical problems imposed by a moving boundary but which nevertheless represents the 'City' in a wider sense.

The next table gives details for the Brisbane Statistical Division and the Statistical Districts of Queensland.

AREA AND POPULATION OF BRISBANE STATISTICAL DIVISION AND STATISTICAL DISTRICTS

Statistical Division or Statistical District	Area in square kilometres at 30 June 1982	Estimated resident population at 30 June 1976	Census Count at 30 June 1981 (a)			Estimated resident population at 30 June	
			Males	Females	Persons	1981	1982
Brisbane	3,080	1,000,850	506,542	521,985	1,028,527	1,096,200	1,124,180
Gold Coast (b) ..	659	97,460	75,873	79,522	155,395	143,090	156,650
Sunshine Coast ..	263	41,780	36,613	37,401	74,014	65,320	71,780
Bundaberg	230	38,460	19,501	20,237	39,738	40,800	41,390
Rockhampton ..	175	53,660	26,412	27,234	53,646	55,620	56,160
Mackay	210	40,750	22,914	22,637	45,551	45,880	47,180
Townsville	546	90,540	48,364	46,240	94,604	96,310	98,010
Cairns	r 177	49,590	31,203	31,223	62,426	58,270	60,500

(a) Refer textual note on page 116.

(b) Excluding the portion in New South Wales which had an area of 516 sq km and estimated resident populations of 13,390 at 30 June 1976, 21,220 at 30 June 1981, and 22,150 at 30 June 1982.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

- Census of Population and Housing (2405.3 and 2406.3) (*irregular*)
- Demography (3101.3) (*annual*)
- Population Estimates and Areas for Local Authority Areas (3202.3) (*annual*)
- Population Growth and Growth Rates in the Intercensal Period in Statistical Divisions and Local Authority Areas (3204.3) (*irregular*)
- Summary of Population and Vital Statistics (3207.3) (*annual*)
- Population Estimates and Areas for Suburbs, Localities, and Local Authority Areas within the Brisbane Statistical Division (3209.3) (*annual*)
- Age and Sex Distribution of Estimated Resident Population in Local Authority Areas (3210.3) (*irregular*)
- Age and Sex Distribution of Estimated Resident Population in Suburbs and Local Authority Areas within the Brisbane Statistical Division (3211.3) (*irregular*)
- Estimated Resident Population in Local Authority Areas (3212.3) (*annual*)

Central Office Publications

- Census of Population and Housing (*a*)
 - Persons and Dwellings in Local Government Areas and Urban Centres (2403.0) (*irregular*)
 - Summary Characteristics of Persons and Dwellings (2437.0) (*irregular*)
 - Cross-classified Characteristics of Persons and Dwellings (2446.0) (*irregular*)
- Estimated Age Distribution of the Population: States and Territories of Australia (3201.0) (*annual*)
- Overseas Arrivals and Departures (3404.0) (*annual*)

(*a*) Results of the 1981 Census are issued in three formats: statistical publications, microfiche, and magnetic tape.

Chapter 7

VITAL STATISTICS

1 REGISTRATION OF VITAL EVENTS

Under the *Registration of Births, Deaths and Marriages Act* 1962–1982 the Registrar-General is charged with the registration of all births, deaths, and marriages within the State and with maintaining certifiable records of all these events.

The Australian *Marriage Act* 1961, which provides for uniformity throughout Australia in matters affecting solemnisation of marriages, was amended in June 1977 increasing the period of notice of marriage from seven days to one month before the intended marriage.

Marriages may be celebrated by the Registrar-General, Brisbane, District Registrars, Ministers of Religion, and other persons authorised to celebrate marriages.

2 BIRTHS

Births in Statistical Divisions

Births, allocated according to the statistical division of usual residence of the mother, are shown in the next table. Where the place of residence of the mother was in another State or overseas, the birth has been shown in the division in which it occurred.

BIRTHS IN STATISTICAL DIVISIONS, QUEENSLAND

Statistical Division (usual residence of mother)	1982			Crude-birth rate (a)	
	Males	Females	Persons	1977	1982 p
Brisbane	9,301	8,902	18,203	15.7	16.2
Moreton	2,518	2,337	4,855	12.6	14.3
Wide Bay-Burnett	1,293	1,234	2,527	17.2	16.2
Darling Downs	1,579	1,397	2,976	17.0	17.5
South-West	302	283	585	19.1	20.8
Fitzroy	1,475	1,292	2,767	17.3	18.5
Central-West	125	133	258	15.5	18.0
Mackay	1,025	924	1,949	20.4	20.9
Northern	1,490	1,368	2,858	18.7	17.9
Far North	1,367	1,335	2,702	19.0	18.8
North-West	453	407	860	22.1	21.4
Total	20,928	19,612	40,540	16.4	16.8

(a) Births per 1,000 mean resident population.

Masculinity of Births

The number of male births to every 100 female births (masculinity) is usually between 105 and 106 for Australia. As there are fewer births for States, their rates vary more widely. In 1982 the masculinity of births registered in Queensland was 107. Higher male mortality reduces this disproportion between the sexes until, in the absence of migration, the sex distribution tends to equalise at about age 50 years and at succeeding ages males become the minority group.

Crude Birth Rates

In the next table, crude birth rates are compared for Queensland and Australia.

BIRTH AND REPRODUCTION RATES, QUEENSLAND AND AUSTRALIA

Period	Crude birth rate (a)		Gross reproduction rate (b)		Net reproduction rate (b)	
	Queensland	Australia	Queensland	Australia	Queensland	Australia
1921-1930 (c)	23.6	22.4	<i>n.a.</i>	1.52	<i>n.a.</i>	1.32
1931-1940 (c)	19.0	17.2	<i>n.a.</i>	1.14	<i>n.a.</i>	1.04
1941-1950 (c)	23.5	21.8	1.49	1.35	1.38	1.28
1951-1960 (c)	24.0	22.7	1.73	1.60	1.66	1.54
1961-1970 (c)	21.5	20.7	1.61	1.50	1.55	1.45
1971-1980 (c)	<i>r</i> 17.9	17.3	1.15	1.09	1.12	1.06
1977	16.4	15.9	1.02	0.98	1.00	0.96
1978	<i>r</i> 15.9	15.6	<i>r</i> 0.98	0.95	<i>r</i> 0.96	0.93
1979	<i>r</i> 15.9	15.4	0.97	0.93	<i>r</i> 0.95	0.91
1980	15.4	15.3	0.93	0.92	<i>r</i> 0.92	0.90
1981	16.6	15.8	0.99	0.94	0.97	<i>r</i> 0.93
1982 <i>p</i>	16.8	15.8	1.00	0.94	0.98	0.93

(a) Births per 1,000 mean population (resident population from 1971). Aborigines are included from 1966.

(b) See following text.

(c) Averages of annual birth rates. Reproduction rates are for the first year of each decade to 1940 and averages of annual rates thereafter.

The Queensland birth rate has shown a general downward trend since the last century. In the 20 years to 1900, the rate averaged 35.5 per 1,000 population and in the first quarter of this century 27.1. Following the low birth rates of the depression years (the average of rates was 19.0 between 1931 and 1940) fertility increased rapidly in the following two decades only to decline again between 1961 and 1966. From 1966 increasing numbers of young women reaching marriageable age caused the rate to rise. There was again a sharp decline in fertility between 1971 and 1980.

Fertility, Gross, and Net Reproduction Rates

Changes since 1946 in fertility, that is the average number of children born to women living through their child-bearing period and subject to the fertility conditions prevailing, are shown in the five-year age-specific rates in the next table. These rates were obtained by dividing the number of births, according to the age of the mother, by the estimated number of women in the corresponding age group. The fertility rate is obtained by summing single age-specific rates or by summing five-year age-specific rates and multiplying by five. This total, divided by 1,000, represents the hypothetical number of children a woman would bear during her lifetime if she experienced the rates of the period shown.

Although the total number of births increased by over 4 per cent in 1982, the fertility rate increased by only 1 per cent. Since 1971, when the fertility rate was 3.02, the population of women in the 15 to 24 years and 25 to 34 years age groups has increased by 32 per cent and 64 per cent, respectively; the fertility for the same age groups has decreased by 37 per cent and 24 per cent, respectively. The decrease in fertility during the period is largely due to the deferment of births, the increase in the median age of mothers of first nuptial children from 23 to 25 years, and to smaller family size.

The gross reproduction rate is derived from total fertility and the ratio of female to total births. It indicates the number of female children who would be born on average to women, assuming the rates from which it was calculated were to apply throughout the reproductive period. The net reproduction rate takes into account deaths of women before or during the reproductive age span. It refers to the number of daughters that would be born to a cohort of newborn girls during their lifetimes, assuming the continuation of the age-specific fertility and mortality rates of the given period. Mortality in childhood and young adulthood is now so low that there is little difference between current gross and net reproduction rates.

AGE-SPECIFIC BIRTH RATES (a), GROSS AND NET REPRODUCTION RATES, QUEENSLAND

Age group (years)	1946-1950 (b)	1951-1955 (b)	1956-1960 (b)	1961-1965 (b)	1966-1970 (b)	1971-1975 (b)	1976-1980 (b)	1982 p
15-19	35.60	40.06	46.51	50.42	55.65	57.75	r 38.02	36.45
20-24	174.83	205.32	230.18	221.72	186.13	170.67	r 127.39	118.71
25-29	195.64	204.17	224.94	217.41	190.67	172.23	r 143.41	148.60
30-34	139.11	135.51	138.63	132.73	106.30	86.81	r 71.12	78.62
35-39	83.96	76.38	75.69	67.97	52.05	37.67	r 24.27	25.90
40-44	26.63	24.88	23.66	21.61	15.29	10.63	r 5.70	5.72
Fertility rate (c)	3.28	3.43	3.70	3.56	3.03	2.68	r 2.05	2.07
G.R.R.	1.59	1.66	1.80	1.73	1.48	1.31	0.99	1.00
N.R.R.	1.49	1.59	1.73	1.66	1.43	1.27	0.97	0.98

(a) Number of births per 1,000 women in each age group. Excluding full-blood Aborigines before 1966.

(b) Average of annual rates.

(c) See preceding text.

Age of Mother, Previous Issue, and Durations of Marriages

The next table shows nuptial confinements by the number of previous issue and total number of children of current marriage.

NUPTIAL CONFINEMENTS (a): AGE OF MOTHER BY PREVIOUS ISSUE AND AVERAGE ISSUE OF CURRENT MARRIAGE, QUEENSLAND, 1982

Age of mother (years)	Confinements	Children of current marriage (b)	Average number of children	Number of previous children of current marriage					
				0	1	2	3	4	5 and over
Under 20	1,449	1,742	1.20	1,177	261	11	—	—	—
20-24	9,996	15,461	1.55	5,742	3,303	792	139	19	1
25-29	12,990	25,755	1.98	4,840	4,824	2,440	698	136	52
30-34	6,790	16,652	2.45	1,603	2,233	1,832	777	227	118
35-39	1,898	5,592	2.95	389	474	440	319	140	136
40 and over	319	1,234	3.87	66	54	41	40	47	71
Total	33,442	66,436	1.99	13,817	11,149	5,556	1,973	569	378

(a) Including only those confinements that resulted in one or more live births.

(b) These totals are derived by multiplying the number of confinements shown in each of the last six columns of the table by the number of previous children plus one, and adding the second or third children of multiple births in 1982.

In the next table, all nuptial confinements are shown according to the previous issue of the current marriage.

NUPTIAL CONFINEMENTS (a): PREVIOUS ISSUE AND AVERAGE ISSUE OF MARRIAGE, QUEENSLAND

Confinements and issue	1977	1978	1979	1980	1981	1982
Number of previous children						
0	12,006	11,742	11,960	11,855	13,219	13,817
1	9,995	9,757	9,903	9,678	10,384	11,149
2	5,139	5,161	5,275	5,065	5,566	5,556
3	1,769	1,684	1,740	1,754	2,020	1,973
4	642	568	548	546	586	569
5 and over	481	436	394	366	352	378
Total confinements	30,032	29,348	29,820	29,264	32,127	33,442
Children of current marriage (b) ..	61,369	59,743	60,329	58,951	64,481	66,436
Average number of children	2.04	2.04	2.02	2.01	2.01	1.99

(a) Including only those confinements that resulted in one or more live births.

(b) See note (b) to the table above.

The first part of the next table shows the ages of mothers at the birth of their first child and the second part, the ages of all mothers.

CONFINEMENTS (a): AGE OF MOTHER BY DURATION OF MARRIAGE, QUEENSLAND, 1982

Age of mother (years)	Confinements		Duration of marriage						
	Total	Ex-nuptial	Under 9 months	9 months and under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	5 years and over
FIRST NUPTIAL CONFINEMENTS									
Under 20	1,177	..	772	139	240	25	1	—	—
20–24 ..	5,742	..	1,125	459	1,691	1,206	675	385	201
25–29 ..	4,840	..	540	260	772	659	606	555	1,448
30–34 ..	1,603	..	202	103	307	178	138	105	570
35–39 ..	389	..	85	35	85	47	30	16	91
40 and over	66	..	17	6	16	6	4	5	12
Total ..	13,817	..	2,741	1,002	3,111	2,121	1,454	1,066	2,322
ALL CONFINEMENTS									
Under 20	3,742	2,293	788	159	366	120	11	4	1
20–24 ..	12,424	2,428	1,157	485	2,047	2,137	1,728	1,241	1,201
25–29 ..	14,168	1,178	553	269	911	1,059	1,285	1,457	7,456
30–34 ..	7,333	543	206	110	351	344	416	389	4,974
35–39 ..	2,114	216	85	35	102	94	103	85	1,394
40 and over	368	49	17	7	17	11	12	13	242
Total ..	40,149	6,707	2,806	1,065	3,794	3,765	3,555	3,189	15,268

(a) Including only those that resulted in one or more live births.

Since 1971, the proportion of first and second to total nuptial confinements has risen from 66 per cent to 75 per cent, a continuation of the pronounced trend that has been evident in Queensland since 1965 when the percentage of such confinements was only 59.

Ex-nuptial Births

The number of ex-nuptial births registered in the State in 1982 was 6,756, the percentage of the total births being 16.67. The pre-war proportion of between 4 and 5 per cent rose to 7.11 in 1944. It then fell to 4.84 by 1951, but has risen again, sharply in recent years, averaging 15.51 per cent during the five years 1978 to 1982. In 1982, 2,293 of the mothers of these infants were under 20 years of age, 3,606 were aged 20 to 29, and 808 were aged 30 or over.

Legitimation of Ex-nuptial Births

The Australian *Marriage Act* 1961 makes the provision for legitimation uniform for the whole of Australia. An ex-nuptial child is automatically legitimated if the parents subsequently marry whether or not there was any legal impediment to such marriage at the time of the child's birth. Formal action is taken to re-register a large number of ex-nuptial births which become legitimate by marriage of the parents. The number of these legitimations was 406 in 1981 and 417 in 1982.

Multiple Births

In 1982 one in every 103 confinements resulting in live-born issue was a multiple birth. There were 386 cases of twins, 4 cases of triplets, and 1 case of quadruplets, the total number of live-born issue being 782.

Still-births (Fetal Deaths)

Notification of still-births in Queensland is compulsory. Existing legislation requires the completion of a medical certificate of perinatal death for each child of not less than 20 weeks gestation, or 400 grams weight, not born alive. This enables the compilation of more detailed statistics in this field. Details of fetal deaths are given in Section 3, Deaths.

3 DEATHS

There were 18,149 deaths registered in Queensland during 1982. These are analysed geographically in the next table, while associated death rates by selected causes and numbers according to cause are shown in Chapter 10, Health, Section 6.

Deaths in Statistical Divisions

In the geographical distribution, the number of deaths, male and female, are shown for each statistical division. Each death is allocated according to the usual place of residence and not the area in which the death actually occurred, except for those cases in which the usual place of residence was in another State or overseas.

DEATHS IN STATISTICAL DIVISIONS, QUEENSLAND, 1982

Statistical Division (usual residence)	All deaths			Deaths under one year	Crude death rate (a)
	Males	Females	Persons		
Brisbane	4,669	3,747	8,416	175	7.5
Moreton	1,460	971	2,431	38	7.2
Wide Bay-Burnett	779	603	1,382	27	8.9
Darling Downs	800	617	1,417	29	8.3
South-West	147	82	229	10	8.2
Fitzroy	609	399	1,008	30	6.7
Central-West	86	46	132	3	9.2
Mackay	334	188	522	13	5.6
Northern	775	478	1,253	43	7.9
Far North	727	410	1,137	44	7.9
North-West	147	75	222	20	5.5
Total	10,533	7,616	18,149	432	7.5

(a) Deaths per 1,000 mean resident population.

Death Rates

The next table gives a comparison of the crude death rates for Queensland and Australia. From the 1920s to the 1960s, the Queensland rate was generally lower than the national average. Since the mid-1960s the proportion of the Queensland population in the older age groups has increased relative to the Australian population and the Queensland death rate has in most years risen above the national average.

CRUDE DEATH RATES (a), QUEENSLAND AND AUSTRALIA

Period	Queensland	Australia	Period	Queensland	Australia
1921-1930 (b)	9.19	9.40	1977	r 7.70	7.66
1931-1940 (b)	8.85	9.31	1978	r 7.65	7.55
1941-1950 (b)	9.19	9.86	1979	r 7.40	7.34
1951-1960 (b)	8.54	9.02	1980	r 7.28	7.40
1961-1970 (b)	8.84	8.82	1981	r 7.33	7.30
1971-1980 (b)	r 8.14	7.95	1982 p	7.50	7.56

(a) Number of deaths a year per 1,000 mean population (resident population from 1971). Aborigines are included from 1966. During World War II all deaths of service personnel were excluded. (b) Averages of annual rates.

Median Ages at Death

Median ages at death are shown below for Queensland at ten-yearly intervals from 1950 and for the latest three years. The higher male mortality at all ages is reflected in the median age of deceased males which is significantly below that of deceased females.

MEDIAN AGE AT DEATH IN SELECTED YEARS, QUEENSLAND

Sex	Median age at death in					
	1950	1960	1970	1980	1981	1982
Males	65.6	67.5	68.0	69.1	69.6	70.1
Females	68.6	71.4	74.2	76.3	76.4	76.7

Still-births and Infant Mortality

Deaths within the first year of life are significant, as those who survive this period have an excellent chance of reaching adulthood. Congenital anomalies, 137, and certain perinatal conditions (especially prematurity and respiratory conditions), 187, accounted for 75 per cent of deaths of infants under one year during 1982, mostly within the first week of life. Complications of placenta, cord, and membranes (48 per cent) were the main maternal causes of fetal deaths.

The next table shows the numbers of perinatal deaths, together with rates per 1,000 births (live and still), in conjunction with corresponding infant death figures. The figures for perinatal deaths for years prior to 1979 have been revised to conform to the new definitions introduced in 1979. (See footnote (c).)

PERINATAL AND INFANT MORTALITY, QUEENSLAND

Particulars (a)	1977		1978		1979		1980		1981		1982	
	No.	Rate (b)	No.	Rate (b)	No.	Rate (b)	No.	Rate (b)	No.	Rate (b)	No.	Rate (b)
PERINATAL DEATHS (c)												
Fetal deaths .. M	124	6.8	128	7.2	137	7.5	154	8.5	151	7.5	124	5.9
F .. F	122	7.2	131	7.8	143	8.3	107	6.3	102	5.4	101	5.1
Period of gestation M	8	0.4	21	1.2	29	1.6	29	1.6	30	1.5	25	1.2
less than 28 weeks F	13	0.8	23	1.4	33	1.9	18	1.1	22	1.2	15	0.8
Period of gestation												
28 weeks and M	116	6.4	107	6.0	108	5.9	125	6.9	121	6.0	99	4.7
over (d) .. F	109	6.4	108	6.4	110	6.4	89	5.2	80	4.3	86	4.4
Neonatal deaths M	191	10.5	162	9.1	124	6.8	129	7.1	160	7.9	156	7.4
F .. F	135	7.9	123	7.3	118	6.9	129	7.6	115	6.1	135	6.8
Under one week M	168	9.3	138	7.7	105	5.7	105	5.8	130	6.4	134	6.4
F .. F	111	6.5	99	5.9	98	5.7	109	6.4	93	4.9	113	5.7
One week and under M	23	1.3	24	1.3	19	1.0	24	1.3	30	1.5	22	1.0
four weeks .. F	24	1.4	24	1.4	20	1.2	20	1.2	22	1.2	22	1.1
Total .. M	315	17.4	290	16.2	261	14.3	283	15.5	311	15.3	280	13.3
F .. F	257	15.1	254	15.1	261	15.2	236	13.9	217	11.5	236	12.0
INFANT DEATHS (e)												
Under one week M	178	9.9	147	8.3	112	6.2	109	6.0	134	6.7	139	6.6
F .. F	116	6.8	103	6.2	106	6.2	115	6.8	96	5.1	117	6.0
One week and under M	25	1.4	25	1.4	19	1.0	24	1.3	31	1.5	22	1.1
four weeks .. F	25	1.5	25	1.5	20	1.2	20	1.2	22	1.2	22	1.1
Four weeks and M	72	4.0	86	4.8	73	4.0	66	3.7	76	3.8	76	3.6
under one year F	62	3.6	58	3.5	50	2.9	60	3.5	66	3.5	56	2.9
Total .. M	275	15.3	258	14.5	204	11.2	199	11.0	241	12.0	237	11.3
F .. F	203	12.0	186	11.1	176	10.3	195	11.5	184	9.8	195	9.9

(a) Cases of indeterminate sex have been included in males. (b) Rate per 1,000 births (live and still) for perinatal deaths, and per 1,000 live births for infant deaths. (c) Deaths of neo-nates within 28 days of birth and fetuses of at least 500 grams at birth or, where birthweight is unknown, of the corresponding gestational age (22 weeks). (d) Including cases where period of gestation is unknown. (e) Including all infants born alive who died within 12 months of birth, irrespective of birthweight.

Infant Mortality Rates

A comparison of Queensland and Australian infant mortality rates since 1921 is given in the next table. In 1900 almost one in every 10 babies born died within the first year of life. In the first 30 years of the century this rate was halved. It was halved again in the next 30 years and again in the 20 years to 1980.

INFANT MORTALITY RATES (a), QUEENSLAND AND AUSTRALIA

Period	Queensland	Australia	Period	Queensland	Australia
1921-1930 (b)	49.16	54.93	1977	13.68	12.47
1931-1940 (b)	38.14	40.05	1978	12.91	12.20
1941-1950 (b)	31.03	31.13	1979	10.80	11.37
1951-1960 (b)	22.32	22.21	1980	11.27	10.70
1961-1970 (b)	19.28	18.76	1981	10.94	9.95
1971-1980 (b)	14.93	14.15	1982	10.66	10.35

(a) Deaths under one year per 1,000 live births. Aboriginals are included from 1966.

(b) Averages of annual rates.

Maternal Mortality

Deaths of females from causes due to pregnancy and childbirth are shown in the next table, together with the mortality rates from such causes per 1,000 live births.

MATERNAL MORTALITY, QUEENSLAND AND AUSTRALIA

Year	Live births		Maternal deaths (a)		Maternal mortality rate (b)	
	Queensland	Australia	Queensland	Australia	Queensland	Australia
1977	34,935	226,291	3	18	0.09	0.08
1978	34,465	224,181	3	14	0.09	0.06
1979	35,195	223,132	3	18	0.09	0.08
1980	34,972	225,527	4	22	0.11	0.10
1981	38,834	235,842	3	25	0.08	0.11
1982	40,540	239,903	3	25	0.07	0.10

(a) Deaths from diseases and complications of pregnancy, childbirth, and the puerperium.

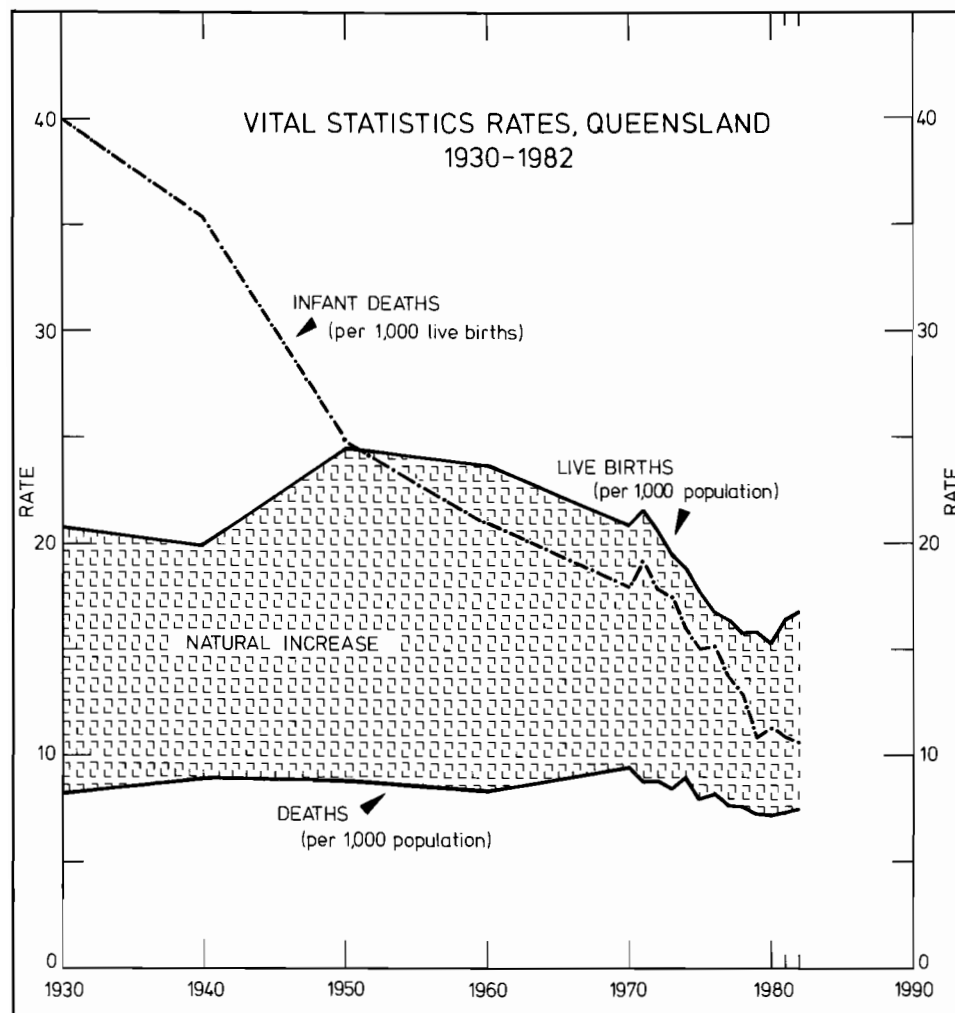
(b) Maternal deaths per 1,000 live births.

Expectation of Life

Figures of expectation of life for males and females in various countries are shown in the next table and provide a more vivid comparison than death rates.

EXPECTATION OF LIFE, VARIOUS COUNTRIES

Country and sex	Period	Expectation of life, in years, at age								
		0	1	10	20	30	40	50	60	65
Australia ..	M 1982	71.2	71.1	62.4	52.8	43.5	34.1	25.1	17.2	13.7
	F 1982	78.2	77.9	69.1	59.3	49.6	39.9	30.6	21.9	17.9
Queensland	M 1982	70.8	70.6	62.0	52.5	43.4	34.0	25.2	17.2	13.7
	F 1982	78.4	78.1	69.4	59.6	49.9	40.2	30.9	22.2	18.2
Canada ..	M 1975-77	70.2	70.2	61.6	52.1	42.9	33.6	24.9	17.2	14.0
	F 1975-77	77.5	77.4	68.7	59.0	49.3	39.7	30.5	22.0	18.0
Denmark	M 1979-80	71.2	70.9	62.1	52.5	43.1	33.7	24.8	17.0	13.7
	F 1979-80	77.3	76.8	68.0	58.2	48.5	38.9	29.8	21.4	17.6
Japan ..	M 1980	73.3	72.9	64.3	54.5	45.0	35.5	26.5	18.3	14.5
	F 1980	78.8	78.4	69.7	59.7	50.0	40.3	30.9	22.0	17.7
New Zealand	M 1975-77	69.0	69.2	60.6	51.2	41.9	32.6	23.8	16.1	n.a.
	F 1975-77	75.5	75.4	66.7	57.0	47.4	37.8	28.8	20.4	n.a.
U.K. ..	M 1977-79	70.2	70.3	61.6	51.9	42.3	32.8	23.8	16.0	12.6
	F 1977-79	76.4	76.3	67.5	57.7	47.9	38.3	29.1	20.6	16.8
U.S.A. ..	M 1979	69.9	69.9	61.2	51.8	42.8	33.6	25.0	17.5	14.3
	F 1979	77.8	77.6	68.9	59.1	49.5	39.9	30.8	22.5	18.7
West Germany	M 1978-80	69.6	69.7	61.0	51.4	42.1	32.8	24.1	16.3	12.9
	F 1978-80	76.4	76.3	67.6	57.8	48.1	38.5	29.3	20.6	16.6



4 MARRIAGES

Marriage Rates

There were 18,928 marriages registered in Queensland during 1982 compared with 18,305 in the previous year. The next table gives a comparison of the crude marriage rates for Queensland and Australia.

CRUDE MARRIAGE RATES (a), QUEENSLAND AND AUSTRALIA

Period	Queensland	Australia	Period	Queensland	Australia
1921-1930 (b)	7.4	7.8	1977	7.4	7.4
1931-1940 (b)	8.1	8.2	1978	7.1	7.2
1941-1950 (b)	9.7	9.9	1979	7.2	7.2
1951-1960 (b)	7.5	7.9	1980	7.5	7.4
1961-1970 (b)	7.9	8.2	1981	7.8	7.6
1971-1980 (b)	7.8	7.9	1982 <i>p</i>	7.8	7.7

(a) Number of marriages a year per 1,000 mean population (resident population from 1971). Aborigines are included from 1966.
(b) Averages of annual rates.

Age and Marital Status

In the next table the age and marital status are shown for persons whose marriages were registered in 1982. Of the 525 brides and 22 bridegrooms aged under 18 years, 4 brides were aged 15, and 1 bridegroom was aged 16. Twenty per cent of persons marrying were divorcees. Ten years ago divorcees remarrying comprised less than 6 per cent of total marriages.

MARRIAGES: AGE AND MARITAL STATUS, QUEENSLAND, 1982

Age at marriage (years)	Never previously married		Widowed		Divorced		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 18	22	525	—	—	—	—	22	525
18-19	743	3,012	—	1	—	3	743	3,016
20-24	7,823	8,121	2	15	85	306	7,910	8,442
25-29	4,050	2,205	7	33	700	920	4,757	3,158
30-34	1,185	546	10	49	919	841	2,114	1,436
35-39	368	183	27	49	757	636	1,152	868
40-44	151	71	34	70	499	391	684	532
45-49	89	32	26	60	356	254	471	346
50-54	52	18	64	73	255	125	371	216
55-59	43	9	79	79	165	57	287	145
60 and over ..	31	13	228	173	158	58	417	244
Total	14,557	14,735	477	602	3,894	3,591	18,928	18,928

The next table shows the median ages of brides and bridegrooms. This is the age above and below which the distribution of ages is equally divided.

MARRIAGES: MEDIAN AGES OF BRIDEGROOMS AND BRIDES, QUEENSLAND

Year	Never previously married		Widowed		Divorced		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
1977	23.53	21.08	54.62	52.03	34.73	30.26	24.79	22.09
1978	23.73	21.22	53.71	51.12	34.72	30.85	25.01	22.23
1979	23.81	21.30	58.91	51.92	36.21	32.74	25.19	22.43
1980	23.84	21.49	59.04	52.21	36.31	32.80	25.27	22.60
1981	24.05	21.65	59.80	51.34	36.43	33.24	25.59	22.84
1982	24.08	21.84	59.45	51.53	36.23	33.11	25.61	22.99

Category of Celebrant

Of the total marriages performed in 1982 in Queensland, 7,507 or 40 per cent were celebrated by civil officers (State Registered Officers, 1,861, and other civil officers, 5,646). The remaining 11,421 marriages were celebrated by officials of the following religious denominations: Roman Catholic, 3,567; Uniting Church, 2,561; Anglican, 2,531; Lutheran, 436; Presbyterian, 422; Baptist, 358; Church of Christ, 214; other religious denominations, 1,332.

5 DIVORCES

The Australian *Matrimonial Causes Act* 1959 placed the divorce laws of all States and Territories on a uniform basis and invested the Supreme Courts of the States with Commonwealth jurisdiction covering dissolution of marriage, judicial separation, nullity of marriage, restitution of conjugal rights, jactitation of marriage, provision of maintenance, custody of children, settlement of property, and damages for adultery.

This Act was replaced by the *Family Law Act* 1975, which instituted the Family Court of Australia and came into operation on 5 January 1976. For details see Chapter 9, Law, Order, and Public Safety, Section 2.

In Queensland during 1982, 6,775 divorces were granted, an increase of 304 on the 6,471 decrees granted in 1981.

The next table provides a summary of divorce statistics for the latest six years for which detailed dissections are available.

DIVORCES, QUEENSLAND

Particulars	Year ended 31 December					
	1977 (a)	1978 (a)	1979 (a)	1980 (a)	1981 (a)	1982 (a)
Petitions lodged	6,810	6,406	5,730	7,209	5,591	7,784
Dissolutions granted	7,293	6,106	5,811	6,219	6,470	6,770
Husbands	2,505	2,006	2,078	2,471	2,698	2,710
Wives	4,788	4,100	3,733	3,748	3,772	4,060
Decrees granted	7,302	6,110	5,817	6,231	6,471	6,775
Decree nisi made absolute	7,293	6,106	5,811	6,219	6,470	6,770
Nullity	9	4	6	12	1	5
Dissolutions by duration of marriage ..	7,293	6,106	5,811	6,219	6,470	6,770
Under 5 years	1,123	1,120	1,082	1,201	1,240	1,308
5-9 years	2,055	1,675	1,666	1,700	1,837	1,888
10-14 years	1,416	1,173	1,044	1,204	1,267	1,313
15-19 years	942	777	747	773	829	923
20-29 years	1,283	954	907	951	943	976
30 years and over	474	407	365	390	354	362
Number of children at dissolution (b) ..	10,132	8,496	7,463	7,784	8,272	8,556
Crude divorce rate (c)	34.19	28.04	26.14	27.33	27.58	p 28.00

(a) Including 192 in 1977, 244 in 1978, 152 in 1979, 231 in 1980, 218 in 1981, and 255 in 1982 granted at Lismore (N.S.W.). (b) Under 18 years. (c) Number of decrees granted per 10,000 mean resident population.

Among the 13,540 persons whose marriages were dissolved during 1982, 672 husbands and 677 wives had been divorced previously. While 2,503 childless couples were divorced in 1982, there were 8,556 living children under 18 years of age (at the time of the petition) involved in the remaining 4,267 marriages dissolved.

In the next table, the number of divorces is dissected according to the ages of both husbands and wives.

DIVORCES: AGES OF PARTIES AT DISSOLUTION, QUEENSLAND

Age of husband (years)	Age of wife (years)								Total
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50 and over	
1981									
Under 20	—	—	—	—	—	—	—	—	—
20-24	19	280	35	6	—	—	—	—	340
25-29	8	471	721	74	10	4	—	1	1,289
30-34	1	80	629	626	65	11	6	2	1,420
35-39	—	15	110	459	418	45	6	6	1,059
40-44	—	4	20	104	370	292	35	14	839
45-49	—	1	5	36	71	229	169	33	544
50 and over	—	2	9	16	34	110	210	598	979
Total	28	853	1,529	1,321	968	691	426	654	6,470
1982									
Under 20	—	—	—	—	—	—	—	—	—
20-24	9	279	38	7	3	2	—	—	338
25-29	6	457	713	75	7	2	2	1	1,263
30-34	—	99	651	622	90	24	4	1	1,491
35-39	—	11	132	494	477	60	6	10	1,190
40-44	—	6	23	93	380	300	52	16	870
45-49	—	3	9	24	96	255	194	35	616
50 and over	—	5	13	16	56	103	207	602	1,002
Total	15	860	1,579	1,331	1,109	746	465	665	6,770

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Demography (3101.3) (*annual*)

Perinatal Deaths (3303.3) (*annual*)

Central Office Publications

Births (3301.0) (*annual*)

Deaths (3302.0) (*annual*)

Perinatal Deaths (3304.0) (*annual*)

Australian Life Tables (3305.0) (1970–72)

Marriages (3306.0) (*annual*)

Divorces (3307.0) (*annual*)

Chapter 8

EDUCATION

1 GENERAL

Education in Queensland ranges from the pre-school level through to tertiary level. In addition child care, kindergarten, and adult education facilities are available. Education is compulsory between the ages of 6 and 15 years and is provided free in government schools. Tertiary and sub-tertiary education is also available free of charge to students who must fulfil the entrance requirements of the various educational establishments.

Assistance Available to Students

Many types of assistance are available to students in the form of awards, scholarships, and bursaries; by the payment of fees for tuition as part of a training or recruitment program; by the reimbursement of fees for courses approved by an employer; or by other assistance such as paid time-off for study purposes.

Government financial assistance is available for general educational purposes to all students subject to specified conditions. This assistance covers student allowances for low-income families, text-book allowances, remote-area allowances, travelling allowances, and accommodation allowances. In addition assistance is available to students attending special schools, Aborigines, adults, and tertiary students.

Details of financial assistance to parents, students, and schools from the State and Commonwealth Governments and the conditions which apply to such assistance are contained in Information Statements published by the Department of Education.

Government Expenditure on Education

Government expenditure on education in Queensland is financed from State revenue and loan raisings and from Commonwealth Government grants for educational purposes. Details of these grants for current and capital purposes are shown in the next table. Financial assistance to the States for educational purposes is the major item of outlay on education by the Commonwealth Government. Additional expenditure by Commonwealth authorities including final consumption expenditure (\$326.0m), personal benefit payments (\$261.2m), and expenditure on new fixed assets (\$23.8m), amounted to \$615m for Australia in 1981-82.

COMMONWEALTH GOVERNMENT AUTHORITIES: OUTLAY ON EDUCATION
(\$'000)

Item	Queensland						Australia
	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1981-82
Grants to the State							
For current purposes							
Pre-schools and child care ..	6,970	7,267	6,972	7,185	7,415	7,544	45,868
Non-government schools ..	25,696	30,198	34,127	40,050	49,757	64,176	423,267
Government schools ..	26,761	24,708	28,208	30,510	39,352	50,213	348,607
Schools—joint programs ..	3,601	4,947	4,483	4,354	4,502	6,766	40,285
Technical, further education	4,537	4,885	5,222	6,932	7,965	8,135	85,118

COMMONWEALTH GOVERNMENT AUTHORITIES: OUTLAY ON EDUCATION—continued
(\$'000)

Item	Queensland						Australia
	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1981-82
Grants to the State—continued							
For current purposes—continued							
Universities	69,427	78,127	80,980	89,684	100,776	118,280	844,981
Colleges of advanced education	48,962	56,616	60,465	67,445	76,325	81,840	544,275
Aboriginal education ..	836	858	904	724	801	835	7,509
Child migrant education ..	2	15	172	262	508	243	3,947
Research and development ..	216	166	131	124	109	120	681
School-to-work transition ..	—	—	r 722	r 1,711	r 5,910	5,201	33,528
Total	187,008	207,787	r 222,386	r 248,981	r 293,420	343,353	(a) 2,381,472
For capital purposes							
Pre-schools and child care ..	314	—	—	—	—	—	325
Government schools ..	24,809	29,506	23,753	19,464	15,541	18,810	116,478
Non-government schools ..	3,077	4,704	5,717	5,145	5,474	6,406	49,152
Schools—joint programs ..	204	54	5	—	—	—	—
Technical, further education	4,439	8,735	15,078	12,717	12,277	15,420	113,723
Universities	11,638	7,335	6,042	8,755	6,253	9,509	48,423
Colleges of advanced education	14,630	7,899	10,712	5,056	5,674	5,711	38,174
Aboriginal education ..	8	84	57	41	33	24	57
Child migrant education ..	—	—	40	15	3	—	102
Video facilities	—	—	—	—	—	820	1,340
Total	59,119	58,317	61,404	51,193	45,255	56,700	(a) 369,297
Total	246,127	266,104	r 283,790	r 300,174	r 338,675	400,053	(a) 2,750,769

(a) Including grants for Schools Commission in the Northern Territory.

Details of State Government expenditure, which amounted to \$1,098m in 1981-82, are shown in Chapter 22, Public Finance, Section 4. Further information is contained in the ABS publication *Expenditure on Education* (Catalogue No. 5510.0).

2 PRE-PRIMARY, PRIMARY, SECONDARY, AND SPECIAL EDUCATION

Pre-school Education and Child Care

Because pre-school, kindergarten, child care, and child minding activities present a composite picture, at the State level, they have not been dealt with separately in this section. To clarify the situation, however, the following table shows ages of children attending pre-school, kindergarten, and child care centres.

Pre-school education has experienced a period of rapid growth and change since the Queensland Education Department entered this field in 1973. In the table, *government centres* include pre-schools owned by the Education Department and the Department of Aboriginal and Islanders Advancement, and day-care centres controlled by other government bodies, including local government authorities. Included in *government assisted centres* are branch centres of the Creche and Kindergarten Association of Queensland and kindergartens associated with that association. Also included are many of the pre-schools attached to non-government schools, and kindergartens receiving special government grants. *Non-profit centres* comprise those controlled by bodies such as local committees and church authorities which do not receive government financial assistance. Some of these centres are in contact with the Creche and Kindergarten Association. The remaining centres are categorised as *private centres* and represent those operated by private enterprise.

It should be noted that the table relates to centre-based activities only; details of home care, vacation, and before and after school care are excluded.

PRE-SCHOOLS AND CHILD CARE CENTRES, QUEENSLAND

Particulars	Category of centre				Total
	Government	Government assisted	Non-profit	Private	
JULY 1981					
Number of centres	564	335	68	110	1,077
Staff (a)	1,637	1,135	108	376	3,257
Teaching (b)	1,574	844	83	249	2,752
Other	62	290	24	128	504
Children	27,708	19,700	3,190	7,616	58,214
Regular enrolments	27,565	19,032	3,156	7,470	57,223
Age in years					
Under 3	510	2,089	174	1,044	3,817
3	728	6,871	1,402	3,206	12,207
4	15,312	7,655	1,282	2,605	26,854
5	10,821	2,360	296	592	14,069
6 and over	194	57	2	23	276
Casual attenders	143	668	34	146	991
JULY 1982					
Number of centres	593	346	78	102	1,119
Staff (a)	1,699	1,185	115	362	3,361
Teaching (b)	1,629	812	82	194	2,717
Other	70	373	33	168	644
Children	29,447	18,872	3,553	8,109	59,981
Regular enrolments	29,323	18,476	3,521	7,936	59,256
Age in years					
Under 3	568	1,820	234	1,267	3,889
3	600	6,605	1,684	3,559	12,448
4	15,873	7,687	1,382	2,509	27,451
5	12,080	2,334	221	592	15,227
6 and over	202	30	—	9	241
Casual attenders	124	396	32	173	725
JULY 1983					
Number of centres	605	360	79	105	1,149
Staff (a)	1,728	1,253	106	373	3,460
Teaching (b)	1,630	748	79	183	2,640
Other	99	505	27	190	820
Children	30,607	20,235	3,461	7,614	61,917
Regular enrolments	30,490	19,982	3,419	7,539	61,430
Age in years					
Under 3	705	2,296	123	1,116	4,240
3	642	6,833	1,609	2,984	12,068
4	16,356	8,183	1,454	2,533	28,526
5	12,638	2,626	227	902	16,393
6 and over	149	44	6	4	203
Casual attenders	117	253	42	75	487

(a) Including full-time equivalent of part-time staff.

(b) Including teachers and teacher assistants/aides.

From 1 July 1973 day-care centres in Queensland were required to comply with standards specified in regulations gazetted under the *Children's Services Act* 1965–1982.

Under the Children's Services Program, the Office of Child Care within the Commonwealth Department of Social Security administers a program of financial assistance for pre-school and child care projects including day care, vacation and after school care, and other related projects. Assistance is provided in the form of payments to the States and also direct payments to non-

profit organisations including local government bodies. Total payments in respect of Queensland for 1982-83 amounted to \$17,489,000, including \$1,142,000 for capital expenditure.

Primary and Secondary Education

Primary and secondary education in Queensland comprises 12 years of full-time formal schooling and is provided by the government as well as the non-government sector. *Primary education* covers the first seven years of schooling and progression to secondary schooling is automatic. *Secondary education* commences in year 8, when students are about 12 to 13 years of age, and extends over five years. Senior Certificates are issued on completion of secondary schooling, and are based on teachers' assessments and internal examinations. This information contributes to the data required for the determination of a Tertiary Entrance Score which, depending on the standard obtained, provides admission to tertiary studies. Students completing year 10, i.e. three years of secondary schooling, are issued with a Junior Certificate which is the accepted educational qualification for entry to many forms of employment, colleges of technical and further education, rural training schools, and certificate courses at colleges of advanced education. A new system of student assessment, known as ROSBA (Review of School Based Assessment), is being progressively introduced. Phase 1 was introduced to 17 schools in Brisbane and Townsville in 1982, Phase 2 commenced in 1983, and the final phase, Phase 3, will be introduced in 1985 when all secondary schools in Queensland will be included.

The diagram on the next page indicates the proportions of primary and secondary students at government and non-government schools in Queensland for selected years and the next table shows the ages of all students at these schools.

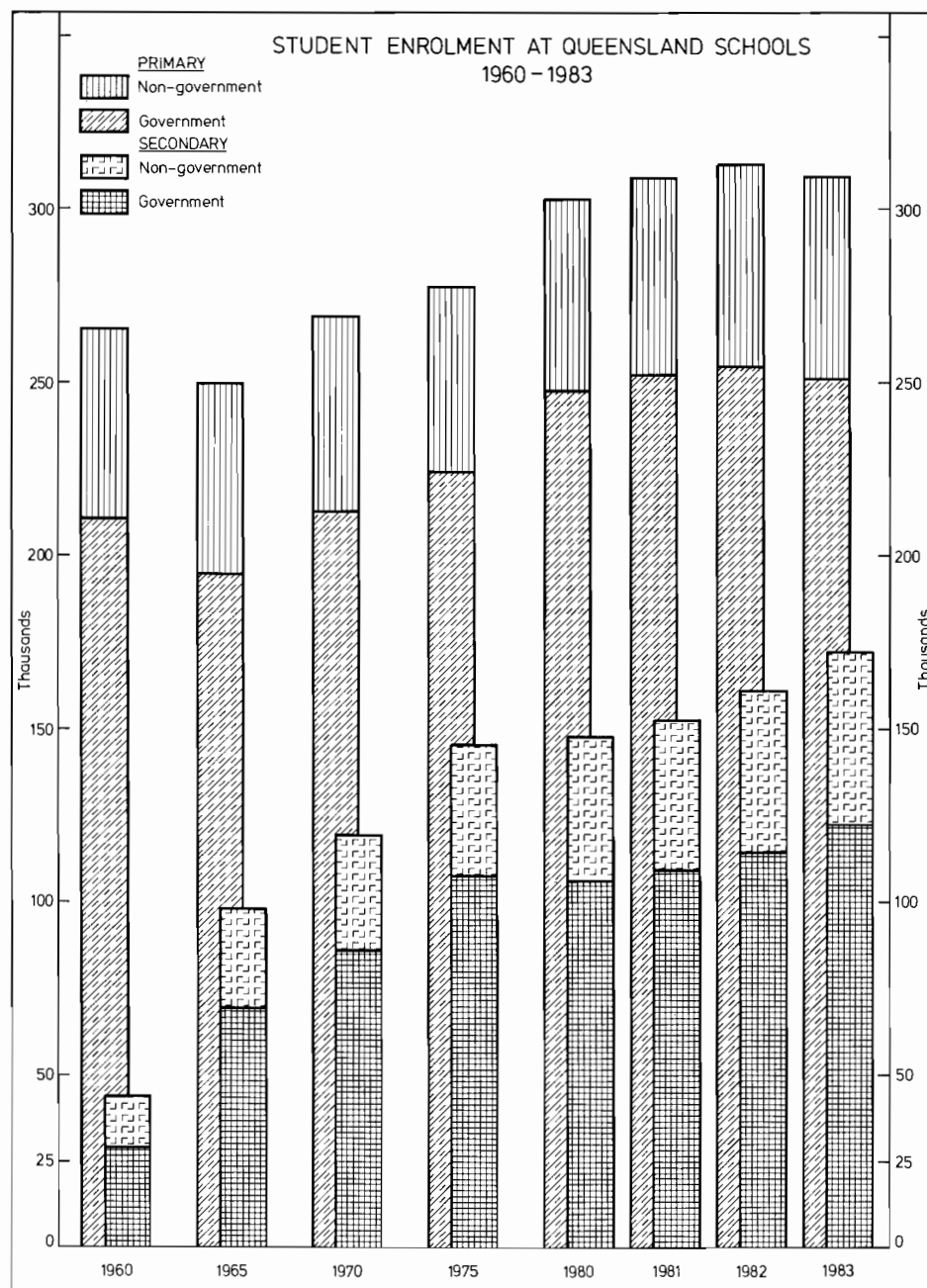
GOVERNMENT AND NON-GOVERNMENT SCHOOLS: STUDENTS BY AGE, QUEENSLAND, 1983

Age at 1 July	Government		Non-government		Total enrolments
	Males	Females	Males	Females	
Under 6 years	8,705	8,647	2,007	2,016	21,375
6 years	16,174	15,459	3,495	3,547	38,675
7 years	16,467	15,778	3,790	3,546	39,581
8 years	17,516	16,420	3,939	3,814	41,689
9 years	18,021	16,945	4,147	4,049	43,162
10 years	18,565	17,891	4,521	4,116	45,093
11 years	19,310	18,465	4,844	4,584	47,203
12 years	18,581	17,885	5,729	5,425	47,620
13 years	16,958	16,311	6,128	5,653	45,050
14 years	16,139	15,723	5,851	5,389	43,102
15 years	12,460	12,045	5,070	4,621	34,196
16 years	7,327	7,517	3,974	3,545	22,363
17 years	3,142	3,362	1,978	1,662	10,144
18 years	584	439	274	208	1,505
19 years and over	347	394	39	30	810
Total	190,296	183,281	55,786	52,205	481,568

The Primary Correspondence School provides educational opportunities for children unable to attend school on account of illness or distance. In remote areas, correspondence lessons are supplemented by tuition through Schools of the Air located at Charleville, Mount Isa, and Cairns, by six itinerant teachers who visit home supervisors of pupils, and by remedial/resource teachers, contact teacher centres, and other services provided under the Priority Country Area Program. The Secondary Correspondence School provides tuition in most secondary subjects.

The majority of primary schools are government schools controlled by the Department of Education. Department of Education high schools, which cater solely for secondary students, and secondary departments attached to a number of primary schools, provide secondary

schooling within the education system. The Department of Aboriginal and Islanders Advancement administers a number of schools for communities in the Torres Strait Islands.



Note. The increase in the secondary school enrolment between 1960 and 1965 reflects the change in the school leaving age from 14 to 15 years in 1964 along with the transfer of year 8 to secondary school. Government secondary enrolments have been affected since 1978 due to the exclusion of non-active enrolments and enrolments for only part of a complete secondary course at the Secondary Correspondence School. See the paragraph above the table on page 142.

Most non-government schools are controlled by religious authorities and provide both primary and secondary education. Grammar schools, controlled by boards of trustees, are mainly for secondary students but also cater for some primary students. Grammar schools are classified as non-government in this chapter.

Particulars of government and non-government schools for 1983 are given in the next table.

The student figures for the Secondary Correspondence School represent *active* enrolments in *complete* secondary courses. Enrolments are classed as *active* if assignments were returned during the month prior to the schools census. The student figures in the following table exclude 562 male and 1,324 female part-time secondary correspondence students.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: SCHOOLS, TEACHERS, AND STUDENTS,
QUEENSLAND, JULY 1983

Controlling authority	Schools			Teachers (b)	Students	
	Primary	Primary and secondary (a)	Secondary		Primary	Secondary
<i>Government</i>	1,047	78	148	21,525	250,955	122,622
Department of Education	1,034	78	148	21,479	250,475	122,622
Ordinary (c)	971	78	147	20,510	244,569	122,216
Correspondence	1	—	1	185	1,620	406
Special	62	—	—	(d) 784	4,286	—
Department of Aboriginal and Islanders Advancement ..	13	—	—	46	480	—
<i>Non-government</i>	225	60	78	5,654	58,264	49,727
Catholic	195	23	61	4,184	51,534	32,568
Anglican	2	9	3	473	1,992	5,328
Seventh Day Adventist	11	1	1	50	626	261
Lutheran	11	1	4	212	1,778	2,088
Other denominational	5	19	2	313	1,937	3,452
Grammar	—	2	6	366	59	5,663
Other undenominational	1	5	1	55	338	367
Total	1,272	138	226	27,179	309,219	172,349

(a) Primary schools with secondary departments.

(b) Including full-time equivalent of part-time.

(c) Including 135 teachers and

1,062 pupils in special units attached to 54 primary schools and one primary/secondary school.

(d) Including 173 special teachers who are

advisory only or who were on a course at census date.

In addition to the full-time education services, classes are conducted at three schools in Brisbane to enable mature-age students to study secondary subjects on a full-time or part-time basis. The majority of these classes are conducted in the evening but day classes are available. At July 1983 full-time and part-time students numbered 370 and 2,690, respectively. Colleges of technical and further education outside Brisbane provide instruction in secondary subjects for part-time students. Details of these and further education classes for recreation or personal enrichment are given later in this chapter.

Special Education

Special schools and special education units have been established to provide education for handicapped children and children with special learning needs. The development of a variety of specialist support services, including remedial/resource teaching and therapies, has enabled the provision of a wide range of specialist help. In addition, school-based services have permitted an increasing number of children with disabilities to be supported in ordinary schools. Isolated children with learning problems can be assisted by correspondence courses at home or at school, following individual diagnosis and advice from the Isolated Children's Special Education Unit of the Department of Education.

Details of full-time students in Department of Education special schools and special classes of primary schools are shown in the following table.

DEPARTMENT OF EDUCATION SPECIAL SCHOOLS AND SPECIAL CLASSES, QUEENSLAND, JULY 1983

Type	Schools	Teachers (a)	Students		
			Males	Females	Persons
Special schools					
Blind and visually handicapped	1	37	52	30	82
Deaf	1	44	68	53	121
Other physically handicapped	11	72	248	185	433
Mildly intellectually handicapped ..	43	415	2,127	1,242	3,369
Other	6	43	167	114	281
Total special schools	62	(b) 611	2,662	1,624	4,286
Primary schools with special classes ..	(c) 55	(d) 135	655	407	1,062
Total all schools with special students	117	746	3,317	2,031	5,348

(a) Source: Queensland Department of Education.

(b) Excluding 173 special teachers who are advisory only or who were on a course at census date.

(c) Including one primary/secondary school.

(d) Teachers of special classes only.

In non-government schools handicapped children and children with special needs are integrated into the ordinary classes and receive additional assistance from various specialist support services.

In addition, there are a number of schools conducted by the State Health Department and non-profit organisations such as the Endeavour Foundation. Details of these schools are excluded from the figures shown above but are published separately in the ABS publication *Primary and Secondary Education* (Catalogue No. 4204.3). Total enrolment at these schools in July 1983 was 1,106.

Migrant Education

The Department of Education provides tuition to adults and children in oral and written English, both in classes and by correspondence lessons. In 1983 a total of 161 day and evening part-time courses were conducted at the Migrant Education Centre in Brisbane with an effective enrolment of 3,721 adults. A further 515 students attended 28 full-time courses at the Centre. Sixteen industrial classes were conducted for the benefit of construction and factory workers. Ninety-four adult external classes operated during 1983, 35 in Brisbane and 59 in country centres. At Wacol Hostel in Brisbane, 249 adults attended full-time courses and 907 adults attended part-time classes during the day and evening. Correspondence lessons were provided for 1,048 students on the basic course and 161 on the advanced course.

Programs were also conducted for children at reception schools and units and at a number of other schools throughout Queensland. A total of 360 secondary and 278 primary children attended classes at reception centres. Sixty-four teachers were employed to provide programs at a total of 32 schools. A further 379 children at other schools were assisted by 13 visiting teachers.

The Queensland Catholic Education Office conducts similar classes at 50 primary and 29 secondary schools throughout the State. A further 63 primary schools were involved in contingency funding for intensive English instruction. Ten ethnic advisory teachers, 53 ethnic resource teachers, and two community/school liaison workers provide the service. Seven ethnic aides assist teachers in schools of high migrant density. Approximately 1,600 students attended classes during 1983.

Comparative Enrolments

The next table shows the broad pattern of students proceeding from year 10 (Junior Certificate) to higher full-time education in Queensland. Correspondence, part-time, and external students enrolled in tertiary courses have been omitted throughout.

From the figures shown, it will be seen that broadly speaking, of students who were in year 10 in 1979, 41 per cent proceeded to year 12 and 16 per cent commenced full-time tertiary studies. Of students who were in year 10 in 1981, 49 per cent proceeded to year 12.

COMPARATIVE ENROLMENTS OF FULL-TIME STUDENTS
AT VARIOUS EDUCATIONAL LEVELS, QUEENSLAND

Year 10		Year 12			Tertiary		
Year	Students	Year	Students	Proportion of column 2	Year	First year students (a)	Proportion of column 4
				%			%
1977	38,324	1979	14,995	39.1	1980	5,910	39.4
1978	36,896	1980	15,251	41.3	1981	5,919	38.8
1979	36,263	1981	15,016	41.4	1982	5,843	38.9
1980	36,337	1982	15,996	44.0	1983	<i>n.y.a.</i>	<i>n.y.a.</i>
1981	36,453	1983	17,810	48.9	..	..	..
1982	38,541	..	..	..	..	..	..
1983	40,640	..	..	..	..	..	..

(a) Students who have recently left school and who have enrolled in a particular course at a particular tertiary establishment for the first time.

3 POST-SECONDARY EDUCATION

Post-secondary education in Queensland involves technical and further education, advanced education, and university education. The text and tables which follow illustrate the variety of courses offered by each sector.

Technical and Further Education (TAFE)

In January 1977 technical education and adult education were integrated, and the combined Technical and Further Education (TAFE) operations in Queensland are now administered by the TAFE Division of the Department of Education.

Technical and further education covers career and pre-vocational education at sub-tertiary level (i.e. courses requiring only partial completion of general secondary schooling as an entrance qualification) and at tertiary level, other than professional courses at universities or colleges of advanced education. It also includes adult education recreational courses, secondary (adult matriculation and vocational) courses, and access (upgrading) courses.

In Queensland, courses are conducted at TAFE colleges, the Technical Correspondence School, and a large number of TAFE centres which mainly offer recreational classes. Courses are also available at the rural training schools and the metropolitan evening tutorial classes which offer adult matriculation subjects. In addition, there are numerous private organisations conducting courses for which fees are charged, but details of these are not available.

The colleges and centres provide training, including apprenticeship training, in a wide variety of engineering, building, commercial, artistic, and domestic occupations. The Technical Correspondence School gives instruction in courses to students in remote areas. The rural training schools provide training in technical and managerial skills in relation to rural industry.

Practical experience in agricultural and livestock production is gained at four centres throughout the State.

The Aboriginal and Islander TAFE Service co-ordinates programs designed to meet the education needs of Aboriginal and Islander individuals, groups, and committees.

TECHNICAL AND FURTHER EDUCATION (TAFE) (a): TEACHING STAFF AND STUDENTS BY TYPE OF INSTITUTION, QUEENSLAND

Particulars	1977	1978	1979	1980	1981	1982
Teaching staff						
Full-time						
Technical colleges	976	1,056	1,113	1,199	1,293	1,517
Technical correspondence school	40	32	33	38	44	49
Evening tutorial classes	21	18	17	16	16	16
Rural training schools	30	42	56	64	71	75
Total	1,067	1,148	1,219	1,317	1,424	1,657
Part-time (b)						
Technical colleges	168	227	255	394	405	690
Technical correspondence school	70	89	87	45	54	134
Evening tutorial classes	21	35	54	42	72	44
Rural training schools	—	—	—	—	—	1
Total	260	351	396	482	531	869
Students						
Full-time						
Technical colleges	3,109	3,525	4,669	5,838	5,753	5,601
Technical correspondence school	—	—	—	—	—	—
Evening tutorial classes (c) ..	145	142	248	233	201	249
Rural training schools	278	298	387	407	424	453
Total	3,532	3,965	5,304	6,478	6,378	6,303
Part-time						
Technical colleges	63,832	67,904	72,657	89,672	100,132	89,063
Technical correspondence school	4,440	5,127	4,780	5,728	6,757	6,577
Evening tutorial classes	2,776	4,365	3,881	3,661	3,613	3,410
Rural training schools	—	31	—	24	42	71
Total	71,048	77,427	81,318	99,085	110,544	99,121

(a) Staff at 30 June; students enrolled during the year.

(b) Full-time equivalent of part-time, including overtime worked by full-time staff.

(c) Also included in schools census figures provided in the secondary education section.

Details of TAFE students, classified by level of course, are shown below.

TECHNICAL AND FURTHER EDUCATION (TAFE): STUDENTS BY TYPE OF COURSE, QUEENSLAND, 1982

Course	Full-time		Part-time		Total		
	Males	Females	Males	Females	Males	Females	Persons
Tertiary (a)	101	234	280	228	381	462	843
Sub-tertiary	521	220	8,668	3,395	9,189	3,615	12,804
Apprenticeship	1,695	187	15,294	1,539	16,989	1,726	18,715
Advanced trade	—	—	1,520	9	1,520	9	1,529
Other skilled (b)	603	2,399	9,811	7,093	10,414	9,492	19,906
Secondary (c)	159	184	2,709	3,799	2,868	3,983	6,851
Recreational	—	—	14,942	29,834	14,942	29,834	44,776
Total	3,079	3,224	53,224	45,897	56,303	49,121	105,424

(a) Including 92 students enrolled in engineering practical training courses who are also enrolled at universities or colleges of advanced education.

(b) Including enrolments at rural training schools.

(c) Excluding full-time and part-time secondary correspondence students.

Advanced Education

Colleges of advanced education participate in three broad programs of activity. The major program comprises approved advanced education courses funded by the Commonwealth Government. Other programs comprise non-advanced education courses funded by the State Government and courses of continuing community education.

Following the implementation of the Commonwealth Government policy of consolidation, the number of colleges of advanced education in Queensland was reduced from 10 to six from 1 January 1982. The colleges of advanced education in Queensland are the Queensland Institute of Technology, Darling Downs and Capricornia Institutes of Advanced Education, the Conservatorium of Music, the Queensland Agricultural College, and the Brisbane College of Advanced Education (formerly Brisbane Kindergarten Teachers' College and Kelvin Grove, Mount Gravatt, and North Brisbane Colleges of Advanced Education).

Townsville College of Advanced Education has been amalgamated with the James Cook University of North Queensland.

In addition to colleges of advanced education there are advanced education diploma level courses in some TAFE colleges and at the non-government McAuley College of Teacher Education.

From 1974 the Commonwealth Government assumed full financial responsibility for approved advanced education courses. Tuition fees were also abolished from that date. Total expenditure on approved advanced education courses in 1982 was \$89,636,602. Expenditure on non-advanced education courses met by the State Government amounted to \$900,000 in 1982.

The activities of the colleges of advanced education are co-ordinated by the Board of Advanced Education which was constituted on 12 November 1970. Co-ordination centres on such matters as planning, allocation of funds to colleges, fields of study, and awards conferred. The Board also collaborates with other statutory authorities with allied interests, e.g. the Board of Teacher Education.

A Board of Teacher Education was constituted on 3 June 1971 under the same legislative provisions as the Board of Advanced Education on which it is represented by the Chairman of the Board or his nominee. The main functions of this Board are to review teacher education in Queensland, and to make reports and recommendations to the Minister on such matters as registration of teachers, accreditation of teacher education awards, and minimum requirements, as well as collaborating with the Board of Advanced Education.

Catholic Education Authorities provide teacher education courses at the McAuley College of Teacher Education. The college, with a total enrolment in 1982 of 446, is not designated as a college of advanced education but is partly funded by the Commonwealth Government.

COLLEGES OF ADVANCED EDUCATION (a): STUDENT ENROLMENTS, QUEENSLAND, 30 APRIL
(Source: Queensland Board of Advanced Education)

Year	Approved advanced education courses (b)		Other courses		All courses		
	Full-time	Part-time (c)	Full-time	Part-time (c)	Males	Females	Persons
1977	11,208	6,345	330	2,347	12,176	8,054	20,230
1978	11,353	8,785	147	1,902	12,959	9,228	22,187
1979	10,836	10,552	142	1,707	13,387	9,850	23,237
1980	10,282	11,918	154	1,757	13,887	10,224	24,111
1981	10,292	12,413	176	1,383	13,835	10,429	24,264
1982	10,713	12,440	149	1,014	13,983	10,333	24,316

(a) Excluding one non-government teachers' college and advanced education enrolments in TAFE colleges. Including advanced education students at James Cook University of North Queensland. (b) Commonwealth funded. (c) Including external enrolments.

Details of students enrolled at colleges of advanced education, by type of course, are shown below.

COLLEGES OF ADVANCED EDUCATION (a): STUDENTS ENROLLED BY TYPE OF COURSE,
QUEENSLAND, 30 APRIL 1982
(Source: Queensland Board of Advanced Education)

Course	Full-time		Part-time (b)		Total		
	Males	Females	Males	Females	Males	Females	Persons
Post-graduate	151	242	1,042	499	1,193	741	1,934
Under-graduate	4,989	5,331	6,942	3,957	11,931	9,288	21,219
TAFE	95	41	262	37	357	78	435
Miscellaneous	7	6	495	220	502	226	728
Total	5,242	5,620	8,741	4,713	13,983	10,333	24,316

(a) Excluding one non-government teachers' college and advanced education enrolments in TAFE colleges. Including advanced education students at James Cook University of North Queensland. (b) Including external enrolments.

The next table shows staff employed at colleges of advanced education.

COLLEGES OF ADVANCED EDUCATION (a): STAFF EMPLOYED, QUEENSLAND, 30 APRIL

Year	Full-time		Part-time (b)		Total (b)		
	Teaching	Other	Teaching	Other	Teaching	Other	Total
1977	1,104	1,374	116	71	1,220	1,445	2,665
1978	1,161	1,484	172	123	1,333	1,607	2,940
1979	1,179	1,572	180	111	1,358	1,683	3,041
1980	1,209	1,552	170	122	1,379	1,674	3,054
1981	1,154	1,648	167	143	1,321	1,791	3,112
1982	1,173	1,537	176	139	1,350	1,677	3,026

(a) Excluding one non-government teachers' college and staff involved in advanced education courses in TAFE colleges. Including staff teaching advanced education students at James Cook University of North Queensland. (b) Full-time equivalent.

University Education

University education in Queensland centres around the University of Queensland and the Griffith University in Brisbane, and the James Cook University of North Queensland in Townsville.

The University of Queensland was established in 1909. There are 13 faculties offering courses leading to 28 bachelors degrees, 47 masters degrees, 12 doctoral degrees, and 10 graduate diplomas. These numbers do not fully represent the diversity of the courses offered. The degree of Bachelor of Engineering, for example, may be taken in the Chemical, Civil, Electrical, Mechanical, or Mining and Metallurgical Engineering Departments. Similarly the degree of Bachelor of Arts may be taken with specialisation in more than 25 honours schools.

A major development in the 1970s was the marked increase in the number of masters degrees involving course work. The University continues to award the traditional masters degree which an honours graduate may attain by completing a research project and submitting a thesis. In addition, pass graduates as well as honours graduates may now approach the masters degree through course work. Currently, major emphasis is placed on fostering post-graduate teaching and research.

The Division of External Studies offers courses leading to degrees in Arts, Commerce, Economics, Law, and Education to students who are unable to attend the University at St Lucia. External Studies Centres have been established throughout the State.

Ten residential colleges offer student accommodation with an approximate capacity of 1,800 persons.

The James Cook University of North Queensland was initially established in 1961 as the University College of Townsville, a college of the University of Queensland. It became a university in its own right in 1970. There are 18 academic departments which form the five faculties of arts, commerce and economics, education, engineering, and science.

As well as offering bachelor degree courses, these faculties also offer masters degree courses and the degree of Doctor of Philosophy. Higher doctoral degrees are also offered.

Being situated in a tropical zone, James Cook University has developed a unique character which combines the more traditional disciplines and research areas normally associated with universities, with research and study into subjects and problems peculiar to the tropics.

An Institute of Advanced Education has been formed within the University, following amalgamation with the Townsville College of Advanced Education from 1 January 1982.

The University has a hall of residence and four residential colleges on campus which accommodate approximately 800 students.

Teaching at Griffith University, founded in 1971, commenced in 1975. The non-departmental school has been adopted by the University as its basic academic unit.

The University currently offers three bachelors degrees: Bachelor of Arts in the Schools of Humanities and Modern Asian Studies; Bachelor of Science in the Schools of Australian Environmental Studies and Science; and the Bachelor of Administration in the School of Social and Industrial Administration. All Schools offer honours degree programs. Appropriately qualified students have enrolled in each of the Schools for post-graduate work towards masters and doctoral degrees by research. The Schools of Australian Environmental Studies and Science offer Master of Science degree programs by course work and the School of Modern Asian Studies offers a Master of Arts degree program by course work.

The next table shows, for the three universities, the number of teaching staff, students enrolled, and receipts for the last six years.

UNIVERSITIES: TEACHING STAFF, STUDENTS, AND RECEIPTS, QUEENSLAND

Year	Teaching staff		Students (b)			Receipts (d)		
	Full-time	Part-time (a)	Full-time (c)	Part-time	External	Government grants	Other (e)	Total
	No.	No.	No.	No.	No.	\$'000	\$'000	\$'000
1977	1,491	90	11,966	6,673	2,874	71,673	1,217	72,890
1978	1,514	97	12,081	7,055	2,822	77,414	947	78,361
1979	1,531	123	11,770	7,218	2,733	83,453	1,435	84,888
1980	1,525	119	12,012	7,513	2,724	91,827	1,560	93,387
1981	1,528	128	12,241	7,530	2,621	104,704	1,624	106,328
1982	1,512	113	12,464	7,721	2,343	125,492	953	126,445

(a) Full-time equivalent of part-time staff on the basis of 250 hours per year for lecturing, and 700 hours per year for tutoring/demonstrating. (b) Excluding students attending extension lectures. (c) Including full-time external students. (d) For recurrent purposes. General Fund only. (e) Including investments.

The next table shows students at the universities in 1982. A commencing student is defined as one who enrolls in a particular course at a particular university for the first time. Students who have completed a pass degree course and who enrol for a separate honours course in the same subject are not regarded as commencing students.

UNIVERSITIES: STUDENTS BY TYPE OF COURSE, QUEENSLAND, 1982

Course	Students commencing courses (a)			Total students (a)			Students completing courses (b)		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Higher Degree									
Doctorate	8	1	9	26	1	27	3	—	3
Ph.D.	180	75	255	753	284	1,037	76	25	101
Masters Degree	419	220	639	1,269	573	1,842	173	68	241
Research	136	67	203	472	194	666	53	18	71
Course work	283	153	436	797	379	1,176	120	50	170
Total	607	296	903	2,048	858	2,906	252	93	345
Bachelor Degree (c)									
Humanities	645	1,054	1,699	2,223	3,781	6,004	379	575	954
Fine Arts	5	23	28	14	55	69	8	12	20
Social and Behavioural Sciences	68	163	231	197	511	708	46	118	164
Law	161	134	295	487	391	878	99	49	148
Education	90	187	277	369	743	1,112	100	130	230
Economics, Commerce, and Government	676	376	1,052	1,721	843	2,564	248	79	327
Medicine	201	287	488	1,078	1,203	2,281	187	297	484
Dentistry	28	20	48	201	69	270	53	12	65
Natural Sciences	506	332	838	1,659	1,022	2,681	392	190	582
Engineering and Technology	344	29	373	1,076	66	1,142	177	5	182
Architecture and Building ..	52	30	82	143	77	220	46	19	65
Agriculture and Forestry ..	24	19	43	110	56	166	33	11	44
Veterinary Science	36	35	71	195	171	366	50	27	77
Total	2,836	2,689	5,525	9,473	8,988	18,461	1,818	1,524	3,342
Non-degree									
Masters Qualifying	62	43	105	110	86	196	..	..	..
Post-graduate diploma	159	144	303	201	174	375	133	128	261
Sub-graduate diploma	—	8	8	1	15	16	5	8	13
Other	183	183	366	291	283	574	—	—	—
Total	404	378	782	603	558	1,161	138	136	274
All courses	3,847	3,363	7,210	12,124	10,404	22,528	2,208	1,753	3,961
University of Queensland ..	2,932	2,575	5,507	9,666	8,455	18,121	1,833	1,467	3,300
James Cook University of North Queensland	384	372	756	1,133	866	1,999	202	131	333
Griffith University	531	416	947	1,325	1,083	2,408	173	155	328

(a) At 30 April 1982.

(b) Year ended 30 June 1982.

(c) Including Post-graduate Bachelor Degree students.

4 PUBLIC CULTURAL FACILITIES

The Queensland Cultural Centre

The Queensland Cultural Centre is being constructed on a site of almost 6 hectares on the south bank of the Brisbane River, adjacent to the site for Expo '88.

The Brisbane architect, Robin Gibson, has designed a Centre that is remarkable in its unity, in the strength of its lines, and the enormity of its scale. Looking at the Centre from the City across Victoria Bridge, the long, low terrace-like lines of the buildings allow an unobstructed view of the Taylor Range in the distance. A symbolic gateway to the City is formed by a walkway which links the Performing Arts Complex and the Art Gallery and spans a main access road.

Construction of the Cultural Centre was planned to take place in four stages. The major component in Stage I was the Queensland Art Gallery which was officially opened in June 1982. Also included in Stage I were the Cultural Centre Trust offices, a 500 vehicle car park, an auditorium, and a restaurant, which have all been fully operational since 1981. Stage II, the Performing Arts Complex, is the largest component of the Centre, and it is anticipated that it will be officially opened early in 1985. Construction on Stage III, the new Queensland Museum, is well advanced, and is expected to be completed late in 1985. Stage IV will provide a new State Library. The current estimated cost of the total project is \$130m.

The Queensland Art Gallery has received almost one million visitors since its opening in June 1982, and has received high acclaim from both the general public and the media. Perhaps the most outstanding feature of the Gallery is the beautiful water mall, which separates the quiet exhibition spaces from the busier administration areas.

A comprehensive range of travelling exhibitions has already been presented in the Gallery, including a number of major international exhibitions. In particular, *The Entombed Warriors* (see photographs facing page 193), on display for four weeks in mid-1982, was an outstanding success, attracting 178,533 visitors. Works from the Gallery's own extensive collection are also featured regularly throughout the year.

Other major functions of the Gallery are the provision of extension services throughout Queensland, and a public program which is devised by the Gallery's education section and implemented with assistance from a team of volunteer guides. This includes tours of the Gallery, lectures, films, and workshops for adults and children. Facilities in the Gallery include a shop and a cafeteria.

The Cultural Centre Auditorium is able to accommodate up to 390 people in theatre style seating. Designed principally for use by the member bodies of the Centre, it is also hired out to the public for a variety of functions. These have ranged from trade displays and concerts to cocktail parties and weddings.

The magnificent Performing Arts Complex comprises two main areas. On the river side is a lyric theatre, with variable seating for between 1,000 and 2,000 people, which is designed specifically for dance and music theatre, but is also appropriate for classic drama and related activities. On the other side is a concert hall, capable of seating 2,000 patrons. This is a rectangular auditorium, designed for symphony concerts, but which can be adapted to suit a wide range of requirements. It is, for instance, equipped with the most up-to-date convention facilities, including simultaneous translation equipment. A magnificent pipe organ is to be an outstanding feature of the concert hall. A studio theatre is provided for small productions and for use as a rehearsal area. A bistro, a kiosk, and several foyer bars will serve refreshments for patrons, and commercial tenancies will provide a small shopping area.

The Queensland Performing Arts Trust will be based in the new complex and will be responsible for its management. As well as providing a venue for international and interstate productions, it is anticipated that it will be used frequently by Queensland performing arts bodies.

Behind the Gallery, Stage III of the Centre, the Queensland Museum is being constructed. Work on site is proceeding smoothly, and it is anticipated that this stage will be completed by the end of 1985.

The Museum, which will cater for two main streams—history and technology, and natural sciences—will have a total area of 18,000 square metres, over twice the area available in the current Museum. One-third of this space will be devoted to display, and two-thirds to collection storage, research, workshop, and education. Twenty-four hour air-conditioning will ensure that the valuable and extensive collection is stored under optimum conditions. Museum staff are already hard at work preparing for the mammoth task of re-location to the new site.

Stage IV, the State Library, will complete present plans for the Cultural Centre. It will contain the main reference collection of the State Library, as well as the John Oxley Library of Queensland History, and is scheduled for completion in 1986.

Promotion of the Centre as an integrated complex is co-ordinated by the Queensland Cultural Centre Trust, which includes in its membership a representative from each group included in the Centre. These members represent the Museum Trust, the Art Gallery Trust, the Library Board, and the Performing Arts Trust. The Cultural Centre Trust is also responsible for the operation and maintenance of all common areas and services. The other Trusts maintain complete autonomy for the day-to-day operation of their own affairs.

The plaza area and grounds at the Centre have already been the venue for a program of free public activities, such as prom-style concerts and children's arts activities. These events have been highly successful, and have attracted a large number of people to the Centre promoting the philosophy that such a Centre should be accessible to all.

The Cultural Centre, on completion, will make a major contribution to the cultural development of Queensland. An imaginative concept, the Centre will serve the whole population of the State.

Libraries

The Library Board of Queensland, established in 1945, operates under the provisions of the *Libraries Act 1943-1979*. Its duty is to attain the fullest co-ordination and improvement of the library facilities of the State for the benefit and educational improvement of citizens. The Board consists of eight members, including the State Librarian as *ex officio* member and secretary.

The John Oxley Library is a separate library within the State Library of Queensland. Its object is to collect books, manuscripts, pamphlets, and other graphic material relating to Queensland and to provide facilities for historical research.

The holdings of the State Library of Queensland and its extension services at 30 June 1983 were as follows: main reference collection, 294,932 volumes, 10,879 microfilm reels, 24,668 microfiche, and 16,107 maps; John Oxley Library collection, 59,644 volumes and 7,530 microfilm reels; Public Libraries Service, 350,872 volumes; Serials Section, 9,761 current magazines; and Audio-visual collection, 14,789 records and cassettes, 32,727 taped books, 1,203 slides, 408 films, and 918 kits and filmstrips.

The policy of the Library Board of Queensland is to encourage Local Authorities to operate library services. At 30 June 1983, 122 Local Authorities were conducting 255 library services, all of which were free. Various councils covering large areas have pooled their resources to provide library services on a regional basis. Five such services have been established: the South-Western (7 Shires), the Central-Western (9 Shires), the North-Western (9 Shires), the Central Highlands (6 Shires), and Sunshine Coast (3 Shires), with headquarters at Charleville, Barcaldine, Mount Isa, Emerald, and Maroochydore, respectively.

Provided Local Authorities comply with conditions laid down by the Library Board, those conducting free library services are eligible to receive from the State Government an annual reimbursement of half their expenditure on books, the salaries of unqualified staff, approved miscellaneous expenditure up to a maximum of \$1.57 per capita or \$2.19 per capita for regional library service, and part of accommodation expenditure. Subsidies are also paid on the salaries of qualified librarians.

For 1982-83 the State Government granted \$11,093,814 from Consolidated Revenue to finance the activities of the Library Board, including subsidies paid to local bodies and regional services.

At 30 June 1983 the Brisbane City Council operated 27 libraries, three mobile libraries for outlying suburbs, five bookmobiles for deliveries to persons unable to use normal library

services, and two special libraries. One of these special libraries is situated at the new Mount Coot-tha Botanic Gardens and caters specifically for gardening, botany, nature study, and astronomy. The other is a reference library for local government officers and is located in the City Hall. At 30 June 1983, 153,980 adult and 65,274 child borrowers were registered at these libraries, and the book and magazine stock, which circulates among all the libraries, was 1,076,815. In the year ended 30 June 1983 the Council expended \$4,481,902 exclusive of the cost of new buildings, and received a government subsidy through the Library Board of \$1,291,350.

The *Libraries Act* 1943–1979 provides for the State Library and the Parliamentary Library each to receive a copy of all books, pamphlets, maps, and other printed material published in Queensland.

Museums

The Queensland Museum, founded in 1855, is the State museum of general science. It is maintained by the State Government. Expenditure in 1982–83 was \$2,515,489. The Museum holds extensive reference collections in the fields of zoology, ethnology, geology, technology, and history, and selected items from these collections are displayed in public galleries. The scientific staff of 17 curators and a conservator is responsible for conservation and research relating to these collections, and the results of this research are published in *The Memoirs of the Queensland Museum*.

The Museum provides an identification service for the public, government departments, and other institutions. School parties are encouraged to use its facilities, and audio-visual lectures and demonstrations are provided for students from pre-school to tertiary level. The Museum publishes booklets relating to its fields of interest and these are available to the public.

The James Cook Museum at Cooktown was opened in 1970 as part of the bi-centenary celebration of Cook's voyage of discovery. It has items and displays illustrating the life styles of the three major cultures involved in the history of the far north: Aboriginal, Chinese, and European. The principal exhibit on Cook's life and voyages of discovery features a cannon and anchor from the barque *Endeavour*.

Cultural Activities

The development of the performing and creative arts and crafts in Queensland has been supported by the State Government. Under the portfolio of the Minister for Tourism, National Parks, Sport and The Arts, the Director of Cultural Activities has rendered advisory and resource services, and provided financial assistance, to professional and voluntary cultural organisations throughout the State. The Government has established Cultural Capital Development programs which offer financial assistance for the construction of cultural centres and complexes.

The main professional performing companies are the Queensland Symphony Orchestra, Queensland Theatre Company, Lyric Opera of Queensland, Queensland Ballet, and the Queensland Theatre Orchestra. The major entrepreneurial organisations are the Queensland Arts Council, the Australian Elizabethan Theatre Trust, and Musica Viva. Partly by arrangement with these entrepreneurs, national and international artists and ensembles stage seasons in Queensland.

In 1982–83, grants totalling \$4,827,600 were made to 234 organisations. These grants comprised \$43,578 to 41 craft groups, \$39,702 to 10 film and television groups, \$15,100 to 16 literature groups, \$2,173,582 to 70 music groups, \$1,434,988 to 42 theatre groups, \$47,300 to 20 visual arts groups, \$1,065,350 to 33 community arts groups, and \$8,000 to two Aboriginal arts groups. The 1982–83 budget also included \$25,546,040 for cultural capital projects.

The Queensland Art Gallery

The Gallery, maintained by the State Government, was founded in 1895. The collection comprises mainly Australian art—painting, sculpture, works on paper, and ceramics with a small but significant collection of European and British works. The Gallery is guided by the aim of establishing a comprehensive survey collection of Australian art. This aim has involved a policy both of ‘filling in’ historical gaps in the collection, and of acquiring works representative of contemporary trends. The collection has been considerably broadened in scope and value by works from lesser known Australian artists as well as from leading artists of particular periods.

Apart from various exhibitions from its own collection, the Gallery participates in an annual program of exhibitions from international, interstate, and local sources.

The Queensland Art Gallery Foundation was established in 1979 for the purpose of raising funds to assist the trustees of the Gallery to maintain, improve, and develop the State’s collection of works of art as well as the facilities and operations of the Queensland Art Gallery itself.

Since that time over \$2.7m has been raised with the assistance of a subsidy provision from the State Government on the basis of one dollar for every two dollars subscribed, to a total of \$1m subsidy.

These funds have enabled the Queensland Art Gallery to purchase significant additions to the State collection.

The education program at the Gallery has been designed to further enjoyment, appreciation, and understanding of art and provides both internal and extension services. The program within the Gallery includes public lectures, monthly floor talks, art-related films, workshops, and studio art classes for both children and adults, as well as group tours conducted by Education Officers and trained volunteer guides. Links are maintained with schools and tertiary institutions and assistance is given to educators utilising the Gallery as a resource. The Extension Services program arranges exhibition tours to centres throughout Queensland and offers an advisory support service to public art galleries.

Government expenditure on the Gallery in 1982–83 amounted to \$1,746,884, which included endowment of \$1,056,652. Acquisitions cost \$642,851, comprising purchases of \$468,655 from State Government funding and \$174,196 from the Gallery trust fund.

Queensland Film Corporation

The Queensland Film Corporation was established in October 1977 for the purpose of encouraging the development of the film industry in Queensland.

The functions and powers of the Corporation are defined in the *Queensland Film Industry Development Act 1977–1981*. This legislation enables the Corporation to provide financial and other assistance to producers of feature films, tele-movies, and television series.

In return for financial assistance it is expected that a quota of local personnel, including trainees, will be employed and that film productions supported by the Corporation will be shot predominantly in Queensland.

Botanical Gardens

Botanic Gardens have been established in Brisbane since 1855 and more recently in Rockhampton, Townsville, and Cairns. The Brisbane Botanic Gardens occupy approximately 18 hectares on the banks of the Brisbane River in the central city area and are noted for their collection of palms, and tropical trees and shrubs; they contain approximately 10,000 specimens.

A new Botanic Gardens has been developed as part of the Mount Coot-tha Forest Park and Garden complex covering 75 hectares in the foothills of Mount Coot-tha, about 5 kilometres

from central Brisbane. This complex includes an arid zone garden, Australian rainforest area, exotic rainforest garden, and fragrant garden as well as the Sir Thomas Brisbane Planetarium and a tropical plant display dome of unique tridetic construction. Each year over 800,000 people visit the Mount Coot-tha gardens. The garden complex has a public lending library and is the headquarters for many Queensland horticultural and natural history societies.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Pre-school Training and Child Minding (4202.3) (*annual*)

Primary and Secondary Education (4204.3) (*annual*)

Central Office Publications

Colleges of Advanced Education (4206.0) (*annual*)

University Statistics (4208.0) (*annual*)

National Schools Collection: Government Schools (4215.0) (*annual*)

Non-government Schools (4216.0) (*annual*)

Expenditure on Education (5510.0) (*annual*)

Other Publications

Annual reports of the Minister for Education, the Board of Advanced Education, the University of Queensland, the Griffith University, the James Cook University of North Queensland, the Library Board of Queensland, the Board of Trustees of the Queensland Museum, and the Queensland Art Gallery.

Chapter 9

LAW, ORDER, AND PUBLIC SAFETY

1 INTRODUCTION

This chapter contains information relating to the exercise in Queensland of the functions of law, order, and public safety.

Other activities associated with law and order are dealt with elsewhere in the *Year Book*. These include elections (Chapter 4) and registration of vital events (Chapter 7). In addition, further details of divorces are contained in Chapter 7.

Public expenditure on law, order, and public safety is detailed in Chapter 22, Public Finance.

2 THE LEGAL SYSTEM

Civil Jurisdiction

The civil jurisdiction of the Queensland Courts is vested in the Supreme Court, District Courts, and Magistrates Courts. Although the Commonwealth Parliament has chosen generally to vest Federal jurisdiction (other than that of the High Court) in the existing State Courts, it has created some special courts, namely the Federal Court of Australia and the Family Court of Australia. Details of the Federal Court are contained in *Year Book Australia*.

Supreme Courts

For the purpose of Supreme Court business, the State is divided into three districts with Central Registries at Brisbane, Rockhampton, and Townsville, and District Registries at Circuit Court Towns. Sixteen judges and two masters (barristers appointed in November 1980 to take over duties of judges in chambers) are appointed to the Southern District (Brisbane), one of whom is President of the Industrial Court, and one each to the Central (Rockhampton) and Northern (Townsville) Districts.

Common law, equity, probate, admiralty jurisdictions, and bankruptcy under Federal jurisdiction are vested in the Supreme Court. Judges are not assigned specifically to any one branch.

For the convenience of litigants the Supreme Court holds periodic sittings in country centres, and for that purpose judges attend Circuit Courts. Appeal lies from judgments of single judges to the Full Bench of the Supreme Court (consisting of not less than three judges), and in certain cases to the High Court of Australia; in some cases not involving Federal jurisdiction, appeal can be carried to the Privy Council. Generally four jurors are appointed if a jury is required by one of the parties.

District Courts

District Court judges numbered 22 at October 1983. Of these, 18 are appointed to Brisbane (three of whom constitute the Local Government Court), one to Rockhampton, and three to

Townsville. Sittings are held as required at various country centres throughout Queensland. The Courts' Registries are at centres where there is a Supreme Court Registry or (in District Court Towns) a Magistrates Court Registry.

The District Court may hear personal actions involving amounts of not more than \$40,000, although, if both parties consent, these limits may be exceeded. It has limited powers in respect of equitable claims and in cases involving the recovery of possession of land. It may also hear appeals from the Magistrates Courts. In cases where the amount or value in issue exceeds \$5,000, one of the parties may, except in certain cases, request a jury. Appeal without leave lies from the District Court in its original or appellate jurisdiction to the Supreme Court in certain cases where the amount or value in issue exceeds \$5,000. In other cases leave to appeal is necessary.

The Family Court of Australia

This superior court was instituted by the Commonwealth Parliament under the *Family Law Act 1975* with jurisdiction in matrimonial causes and other matters relating to dissolution of marriage, e.g. custody or maintenance of children, maintenance of spouse, property, etc. Eight judges are appointed in Queensland, and, in addition to the Registry centres at Brisbane, Townsville, and Rockhampton, sittings are held in Cairns and Lismore (N.S.W.).

Magistrates Courts

Magistrates Courts are constituted by stipendiary magistrates or, in certain circumstances, by registrars not being members of the Police Force. The jurisdiction, unless extended by consent, is limited to personal actions in which not more than \$5,000 is claimed. Appeal without leave lies to the District Court where \$600 or more is involved.

Small Claims Tribunal

A Small Claims Tribunal, which became operative in July 1973, has jurisdiction over disputes between consumers and traders involving amounts of up to \$1,500. The tribunal, presided over by a referee, is intended to settle disputes quickly and cheaply. No legal representation is permitted except with agreement of both parties and the referee.

Small Debts Courts

A system of Small Debts Courts was set up in July 1975 so that traders and other creditors can effect more economical recovery of debts up to \$1,500. Hearings of such actions are informal and in closed court before a stipendiary magistrate sitting alone. No legal representation is permitted except with the consent of both parties and the leave of the court.

Criminal Jurisdiction

Criminal jurisdiction in regard to indictable offences is vested in the Supreme Court and District Court and is exercised in each case by a judge sitting with a jury of 12. A preliminary hearing is held before a stipendiary magistrate or justices of the peace for the purpose of determining whether a prima-facie case has been made out. The matter then proceeds on indictment to either the Supreme Court or the District Court, depending on the seriousness of the offence. The District Court has no jurisdiction in the case of an offence where the maximum penalty exceeds 14 years' imprisonment.

Appeal lies from the Supreme Court or District Court to the Court of Criminal Appeal or the Full Court, and can, with special leave, be taken to the High Court of Australia. The right of appeal applies to the Crown upon sentence, and to the person convicted on indictment upon conviction or sentence.

Stipendiary magistrates constituting Magistrates Courts have jurisdiction to hear and determine simple offences and breaches of duty. Certain indictable offences may also be dealt with summarily whereupon the maximum penalty which may be imposed is imprisonment for two years or a fine of \$1,000. Generally, decisions of stipendiary magistrates are subject to a right of appeal to a Higher Court.

Children's Courts

Children under the age of 17 years who come before the Court are dealt with under the *Children's Services Act* 1965–1982. A Children's Court has jurisdiction to try or sentence, under certain conditions, a child charged with an indictable offence other than an offence for which he would be liable, were he not a child, to imprisonment with hard labour for life. Children charged with simple offences or breaches of duty also appear before a Children's Court, as do children in respect of whom an application may be made to the Court for their committal to care and control (uncontrollable children etc.) or admission to care and protection (neglected children etc.). The custody or maintenance of a person under the age of 18 years may be sought by the mother or father by application to the Supreme Court or a Children's Court.

In country areas the Court is presided over by a local stipendiary magistrate, or in his absence, in certain circumstances, by two justices of the peace, and in the metropolitan and near country areas by a specially appointed Children's Court Magistrate. Proceedings are held *in camera* and a representative of the Department of Children's Services is present. Rights of appeal are similar to those applicable to Magistrates Courts.

The Licensing Court

Under the *Liquor Act* 1912–1982, the regulation and control of liquor licences and licensees is vested in a Licensing Court, presided over by a District Court Judge appointed by the Governor in Council, and a Licensing Commission, consisting of five members, four of whom are appointed by the Governor in Council, the remaining member being the Executive Officer of the Licensing Commission.

The Court, in conjunction with recommendations from the Commission, has power to issue, cancel, remove, or forfeit licences, provided that the combined numbers of licensed victuallers' (hotel) and tavern licences do not exceed the number of licensed victuallers' licences in existence in 1935.

When a licence is cancelled, surrendered, or forfeited it may be removed to another locality with the Court's approval and sold by public tender. Any premium on the sale of such licences is credited to the Liquor Act Trust Fund for compensation.

The Court may also grant licences to motels, resorts, clubs, restaurants, theatres, cabarets, function rooms, spirit merchants, and various other types of premises.

The Commission is charged with the supervision of licensed premises to see that they are properly conducted, that reasonable stocks and varieties of liquor are kept, and, in the case of hotels, to ensure that adequate meals and accommodation of prescribed standard are provided. The Court, on motion of the Commission, has the power to forfeit or suspend licences where the prescribed requirements are not met.

Fees assessed on the purchase price of liquor bought during the previous year are collected from licensees. For details of revenue collected from liquor licensing see Chapter 22, Public Finance, Section 6.

The Legal Profession

In Queensland the legal profession is divided into barristers and solicitors, and a barrister in practice as such may not practise as a solicitor. A barrister does not accept instructions directly from clients but acts on the instructions of a solicitor.

Admission to the Bar is regulated by the Barristers' Board acting under Rules of the Supreme Court and the professional association which represents and exercises disciplinary control over barristers is the Bar Association of Queensland. By becoming a barrister, a legal practitioner specialises in appearance in Courts and in giving opinions on legal questions and advice as to the conduct of litigation. At 30 June 1983, there were 292 barristers in private practice in Queensland.

Solicitors come within the jurisdiction of the *Queensland Law Society Act* 1952-1980 and the Rules thereunder. The Solicitors' Admission Rules regulate Articles of Clerkship and prescribe the conditions of entry to the profession. Solicitors holding current Practising Certificates have the right of audience in all Courts in Queensland. The Act provides for the hearing of charges of malpractice, professional misconduct, or unprofessional conduct or practice. At 30 April 1983, there were 1,941 solicitors holding Practising Certificates in Queensland.

Eligibility for Jury Service

Every person under 70 years, who has reached the age of 18, resides in Queensland, and is eligible to vote in State elections is normally liable for jury service. Persons convicted of an indictable criminal offence and persons unable to read or write English are among those disqualified. Other persons exempted because of their particular occupation are Members of Parliament, lawyers, doctors, etc. Women may elect not to serve by giving due notice without stating reasons. Male persons who apply to be excused must show good cause.

Legal Assistance

Legal assistance in Queensland is available in civil and criminal matters to persons meeting specified eligibility conditions. A person to whom legal aid has been granted may be required to make some contribution towards costs.

The Queensland Legal Aid Commission, established by the *Legal Aid Act* 1978, took over State responsibility for the functions of the Commonwealth Legal Aid Office, the Queensland Legal Assistance Committee, and some of the legal advice work performed by the Public Trust Office. The Scheme provides legal advice and legal aid in court cases.

On the other hand the *Public Defence Act* 1974 requires the Public Defender to render legal aid in connection with trials and sentences for indictable offences, committal proceedings where a person is charged with an indictable offence punishable upon conviction by imprisonment for a term exceeding 14 years, appeals to the Court of Criminal Appeal, and such other proceedings, not being civil proceedings, as the Minister directs.

3 POLICE

The strength and main activities of the Police Department in Queensland are detailed in the next table.

In addition to their main duties of protecting life and property, preventing and detecting crime, and preserving good order, police officers, because of their wide representation throughout the State and their local knowledge and facilities, carry out many and varied duties as agents for other government departments, both Commonwealth and State. Many also assist in the social work of the Queensland Police Citizens Youth Welfare Association with its 26 clubs and a membership of approximately 17,000 in 1983.

QUEENSLAND POLICE: STRENGTH AND MAIN OPERATIONS
(Source: Queensland Police Department)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
DEPARTMENTAL STRENGTH AT END OF YEAR						
Sworn-in personnel						
General police	3,288	3,195	3,327	3,577	3,572	3,652
Technical and scientific police (a) ..	—	100	106	122	132	136
Detectives and plain clothes police ..	570	607	587	639	630	726
Total	3,858	3,902	4,020	4,338	4,334	4,514
Other police personnel						
Probationaries	78	58	247	94	101	204
Cadets	297	172	120	122	108	151
Native trackers	2	3	3	3	4	2
Total	377	233	370	219	213	357
Total police strength						
Metropolitan (b)	2,323	2,219	2,467	2,475	2,370	2,641
Country	1,912	1,916	1,923	2,082	2,177	2,230
Total	4,235	4,135	4,390	4,557	4,547	4,871
Public service staff	623	638	645	641	668	705
Other civilian staff (c)						
Driver's licence testing officers ..	22	20	17	16	14	14
Others	21	21	22	22	23	23
Total	43	41	39	38	37	37
Population per sworn-in officer ..	r 563	r 568	r 564	r 541	r 558	548

GENERAL CRIME (d)

Homicide	121	167	137	144	161	157
Serious assault	721	945	1,228	1,395	1,648	1,638
Minor assault	1,775	2,020	2,215	2,456	2,651	2,511
Robbery	308	273	298	321	390	442
Rape and attempted rape	69	59	100	121	121	114
Other sexual offences	979	1,127	1,275	1,382	1,309	1,523
Breaking and entering	16,276	17,948	19,882	23,339	25,545	30,576
Stealing etc. motor vehicles	5,617	5,892	5,870	6,057	6,569	7,763
Other stealing	34,531	37,712	40,151	41,862	42,874	49,232
Malicious damage	7,523	7,709	7,925	8,253	9,448	9,685
Fraud and false pretences	7,186	6,422	8,658	8,026	8,298	10,931
Drug offences	2,899	3,598	4,504	5,691	7,519	10,177
Stock offences	394	522	524	518	683	401
Drink driving offences	11,084	14,790	16,756	19,408	20,621	20,656
Other offences	7,522	8,335	8,528	9,516	10,652	10,852
Total reported	97,005	107,519	118,051	128,489	138,489	156,658
Cleared %	50	52	51	52	53	51
Cleared (minors) (e) %	16	17	17	17	17	17

OFFENCES AGAINST GOOD ORDER

Drunkenness	31,796	33,443	35,161	35,465	35,923	31,063
Obscene language	3,169	3,643	3,607	4,343	4,817	4,180
Disorderly conduct	1,274	1,128	1,186	1,590	1,077	1,004
Resisting arrest	1,510	1,536	1,655	1,862	2,224	2,068
Evading fares	115	112	284	191	213	287
Total	37,864	39,862	41,893	43,451	44,254	38,602

(a) Police engaged in technical and trade areas and on scientific duties, previously included under the heading 'General police' but from 1 August 1978 appointed to the new Technical and Scientific Officer Structures within the Force. (b) Relating to police stations within the City of Brisbane. (c) Excluding part-time staff, groundsmen, etc. (d) Crimes reported or becoming known to the police as recorded in the annual report of the Police Commissioner. (e) Minors are defined as persons aged under 17 years.

MAGISTRATES COURTS (a): APPEARANCES, CONVICTIONS, ETC., QUEENSLAND, 1981-82—continued

Particulars	Appearances		Convictions		
	Males	Females	Imprisoned	Fined	Other (b)
<i>Theft, breaking and entering, etc.</i> ..	5,041	1,676	652	4,617	1,448
Motor vehicle theft etc. ..	554	42	148	300	148
Other stealing ..	3,229	1,537	195	3,648	923
Receiving/unlawful possession ..	385	53	32	322	84
Burglary and housebreaking ..	425	29	155	147	152
Other breaking and entering ..	448	15	122	200	141
<i>Property damage</i> ..	1,050	68	38	896	184
Arson ..	—	—	—	—	—
Other property damage ..	1,050	68	38	896	184
<i>Driving, traffic, etc.</i> ..	67,799	7,173	662	73,972	338
Drink driving etc. ..	17,695	798	288	18,034	171
Dangerous/negligent driving ..	2,286	281	20	2,529	18
Other driving, traffic, etc. ..	47,818	6,094	354	53,409	149
<i>Other offences</i> ..	20,311	4,223	396	17,630	6,508
Drug offences ..	3,795	559	145	3,985	224
Drunkenness ..	5,654	1,063	7	687	6,023
Offensive behaviour ..	1,214	241	7	1,299	149
Trespass and vagrancy ..	273	505	98	649	31
Firearm etc. offences ..	321	12	35	273	25
Liquor offences ..	478	63	—	540	1
Other offences ..	8,576	1,780	104	10,197	55
Total summary convictions ..	96,965	13,558	2,030	99,509	8,984
Committed for trial or sentence ..	1,967	302	Not applicable		
Bail estreated (c) ..	26,985	2,601			
Discharged or withdrawn ..	11,987	2,001			
Total appearances ..	(d) 137,904	18,462			

(a) Excluding Children's Courts.

(b) Comprising 6,303 convicted and not punished, 1,307 on probation, 1,001 on recognizance bond, and 373 ordered to perform community service.

(c) Including no conviction recorded and deferred sentences.

(d) Including 2,059 cases against companies.

CHILDREN'S COURTS: APPEARANCES BY OFFENCE AND OUTCOME, QUEENSLAND, 1982-83
(Source: Department of Children's Services)

Offence	Appearances		Proven offences (a)					
			Convicted			Unconvicted		
	Males	Females	Committed into care	Placed under supervision	Other (b)	Committed into care	Placed under supervision	Other (c)
Homicide ..	8	—	1	—	—	—	—	—
Assault, major ..	42	4	3	—	1	9	6	18
Assault, minor ..	85	26	3	3	18	16	15	45
Sex offences ..	19	—	1	—	—	2	3	2
Robbery and extortion ..	17	4	—	—	—	6	3	1
Breaking and entering ..	1,009	54	115	21	12	217	156	481
Motor vehicle theft etc. ..	424	17	74	7	12	83	53	197
Other stealing ..	516	116	29	12	11	87	113	349
Arson ..	14	—	—	—	—	1	1	1
Other wilful damage etc. ..	114	9	8	5	6	14	13	68
Fraud and false pretences ..	16	6	3	—	3	—	7	9
Drug offences ..	105	12	5	1	12	7	8	75
Drink driving ..	57	4	2	3	39	1	—	15
Other traffic and transport ..	681	23	1	1	347	4	7	333
Drunkenness ..	79	26	1	—	6	—	—	97
Disorderly conduct (d) ..	150	51	2	2	27	8	10	146
Other offences ..	160	26	8	—	10	24	26	100
Total ..	3,496	378	256	55	504	479	421	1,937

(a) All appearances where guilt has been established.

(b) Including imprisoned, fined and/or restitution etc.

(c) Including admonished and discharged etc.

(d) Including obscene language, indecent behaviour, etc.

The preceding table shows details of appearances in Children's Courts during 1982-83. A child appearing on several charges at the one hearing is counted once only, and classified to the most serious charge. The total number of charges involved in 1982-83 was 9,314.

The volume of Children's Court business is directly related to the method by which the police deal with juvenile offenders. Depending on policy relating to the cautioning of juvenile offenders, the number of juveniles proceeded against fluctuates over time. This policy is also reflected in total court business, particularly for offences where there is a significant proportion of juvenile activity.

5 PRISONS, PROBATION, AND PAROLE

Prisons

During 1982-83 there were 8 prison establishments in use in the State, administered by the Comptroller-General of Prisons for the Minister for Welfare Services. The Brisbane prison complex comprises a maximum security prison, a remand prison, and a women's prison. Townsville is a maximum and medium security prison, Rockhampton and Woodford (Brisbane) are maximum security prisons, and Wacol is a medium security prison. Criminally insane patients are accommodated at the Security Patients Hospital situated on the reserve of Wacol Prison. Two other prisons, Rockhampton Gaol and Thursday Island Prison, had not accommodated prisoners for some time and were closed in April 1983 and July 1983, respectively. The State Farms at Palen Creek and Numinbah, both south of Brisbane, are fully open institutions, in that prisoners are placed on their honour not to attempt to escape.

For the year ending 30 June 1983, the daily average number of prisoners was 1,623 men and 44 women.

Prison workshops and farms provide inmates with an opportunity to learn or improve skills in such areas as carpentry, metal work, tailoring, spray painting, mechanics, and farming. Training opportunities are also available in the service areas of catering and laundering.

Education and release to work programs are available to inmates in order to assist their effective assimilation into the community upon release.

The next table shows for six years the number of prisoners admitted each year and the number in confinement at the end of each year.

PRISONS AND PRISONERS, QUEENSLAND
(Source: Prisons Department)

Year	Prisons	Prison farms	Prisoners admitted during year (a)		Prisoners in confinement at end of year (b)		
			Males	Females	Males	Females	Per 100,000 population (c)
1977-78	8	2	4,594	292	1,597	37	75
1978-79	8	2	4,506	294	1,697	43	79
1979-80	8	2	4,681	335	1,686	53	77
1980-81	8	2	4,993	347	1,733	49	r 76
1981-82	8	2	4,899	320	1,661	45	r 71
1982-83	6	2	5,292	281	1,728	45	72

(a) Individuals confined on more than one occasion during the year are counted separately for each confinement.
(b) Including persons held pending court action (168 in 1982-83).

(c) Estimated resident population.

The next table shows the type of offence and length of sentence for convicted persons admitted to prison in 1982-83. In this, and the following table on probation, community service, and parole, persons involved with more than one offence are counted once only, and classified to the most serious offence.

PRISONS: CONVICTED PRISONERS ADMITTED (a), QUEENSLAND, 1982-83
(Source: Prisons Department)

Offence	Length of sentence						Total
	Week-end sentences	Under 6 months	6 months and under 1 year	1 year and under 5 years	5 years and under 10 years	10 years and over (b)	
Homicide (including dangerous driving causing death)	—	4	2	12	8	9	35
Assault (including sex offences)	4	190	47	85	25	9	360
Robbery and extortion	—	5	11	34	21	2	73
Fraud and misappropriation	2	104	42	43	1	—	192
Theft, breaking and entering, etc.	7	688	211	190	4	—	1,100
Property damage	—	89	7	8	1	—	105
Driving, traffic, etc.	135	1,060	110	19	—	—	1,324
Drug offences	5	237	52	25	9	1	329
Other	4	423	18	26	—	—	471
Total	157	2,800	500	442	69	21	3,989

(a) Individuals admitted on more than one occasion are counted separately for each admission. Excluding 1,584 prisoners not under sentence. (b) Including habitual criminals and life and indefinite sentences (9 in 1982-83).

Probation, Community Service, and Parole

The Probation and Parole Service was established under the *Offenders Probation and Parole Act 1980-1982* and is administered by the Minister for Welfare Services. The primary objective of the service is the furthering of justice by measures that afford protection to society through the control and rehabilitation of offenders within the community.

Where a person is convicted of an offence punishable by a term of imprisonment the Court may, instead of sentencing the offender, make an order whereby the offender is placed under the supervision of a probation officer. During the year ended 30 June 1983, there were 2,807 admissions to probation, 1,445 successful completions, and 189 breaches resulting in termination, leaving 3,702 persons on probation at the end of the year.

A further sentencing option, community service orders, became available to Courts in March 1981. Persons convicted of an offence punishable by a term of imprisonment may, instead of being sentenced, be ordered to perform unpaid community service work for periods ranging from 40 hours to 240 hours under the supervision of a probation officer. During 1982-83, 1,415 orders were issued, involving 173,552 hours. Of these, 760 orders were completed successfully and 75 orders were revoked. At the end of the period, 848 persons remained under supervision.

A Parole Board consisting of a Supreme Court Judge, the Under Secretary of the Department of Justice, the Comptroller-General of Prisons, and three other members was established under the *Offenders Probation and Parole Act 1980-1982*. The Board may recommend to the Governor in Council the release on parole of prisoners undergoing life sentences while the Board itself may parole other prisoners. In 1982-83, admissions to parole numbered 219, successful completions numbered 173, and there were 24 breaches resulting in termination. Persons on parole at the end of that year numbered 361.

The next table shows the types of offences for which persons were admitted to probation and community service orders and released to parole during the year.

PROBATION, COMMUNITY SERVICE ORDERS, AND PAROLE: ADMISSIONS TO ORDERS, QUEENSLAND, 1982-83
(Source: Queensland Probation and Parole Service)

Offence	Type of order								
	Probation			Community service			Parole		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
<i>Homicide etc.</i>	5	3	8	4	—	4	24	6	30
Murder and attempted murder	1	—	1	—	—	—	7	—	7
Other related offences	4	3	7	4	—	4	17	6	23
<i>Assault etc.</i>	260	23	283	77	5	82	46	3	49
Major assault	56	12	68	26	3	29	9	2	11
Minor assault	115	11	126	36	2	38	5	—	5
Rape	1	—	1	—	—	—	20	—	20
Other sex offences	81	—	81	15	—	15	8	1	9
Other violation of persons	7	—	7	—	—	—	4	—	4
<i>Robbery and extortion</i>	21	3	24	6	1	7	23	—	23
Robbery	21	3	24	6	1	7	22	—	22
Extortion	—	—	—	—	—	—	1	—	1
<i>Fraud and misappropriation</i>	127	73	200	47	11	58	19	4	23
Embezzlement	4	1	5	1	—	1	3	1	4
Fraud and forgery	123	72	195	46	11	57	16	3	19
<i>Theft, break and enter, etc.</i>	1,264	330	1,594	504	66	570	65	3	68
Motor vehicle theft etc.	282	31	313	133	5	138	8	1	9
Other stealing	535	250	785	198	49	247	18	—	18
Receiving	52	14	66	24	2	26	11	—	11
Unlawful possession of property	69	7	76	14	1	15	6	—	6
Burglary and housebreaking	108	12	120	36	3	39	9	—	9
Other breaking and entering	218	16	234	99	6	105	13	2	15
<i>Property damage</i>	121	18	139	71	2	73	4	—	4
Arson	20	3	23	1	—	1	4	—	4
Other property damage	101	15	116	70	2	72	—	—	—
<i>Driving, traffic, etc.</i>	121	10	131	380	25	405	4	—	4
Drink driving	48	7	55	208	15	223	—	—	—
Dangerous/negligent driving	26	1	27	20	—	20	4	—	4
Other driving, traffic, etc.	47	2	49	152	10	162	—	—	—
<i>Other offences</i>	357	71	428	191	25	216	16	2	18
Drug offences	269	66	335	141	24	165	15	2	17
Offensive behaviour	8	1	9	4	—	4	—	—	—
Breach of probation	12	1	13	18	—	18	—	—	—
Other offences	68	3	71	28	1	29	1	—	1
Total	2,276	531	2,807	1,280	135	1,415	201	18	219

Children Committed to Care and Supervision

Children under the age of 17 years found guilty of offences are rarely committed to prison but may be committed to the care and control of the Director of the Department of Children's Services. Alternatively, the Director may be ordered to exercise supervision over them or they may be admonished and discharged without convictions being recorded. The committal to care, and the supervision, may be effected with or without convictions being recorded.

Children committed to the care and control of the Department of Children's Services may be placed in government institutions, in denominational homes approved as suitable detention centres, under other approved custodial arrangements, or in any placement which the Director considers to be advantageous to the child (e.g. at home with parents). Much greater use is currently being made of home and community placements. Details of children under care and control are shown in Chapter 11, Social Welfare, Section 6.

The aim of supervision (the term applied to juvenile probation in Queensland) is to prevent the need for the child to come under the care and control of the Director. A summary of children under supervision for the latest six years is set out below.

CHILDREN PLACED UNDER SUPERVISION, QUEENSLAND
(Source: Department of Children's Services)

Year	Children under supervision							
	At beginning of year		Admitted during year (a)		Discharged during year		At end of year	
	Males	Females	Males	Females	Males	Females	Males	Females
1976-77	705	133	401	76	484	75	622	134
1977-78	622	134	421	66	292	59	751	141
1978-79	751	141	366	71	281	42	836	170
1979-80	836	170	342	69	240	42	938	197
1980-81	938	197	441	92	334	65	1,045	224
1981-82	1,045	224	406	99	529	110	922	213

(a) Including protective supervision (99 in 1981-82).

6 LIQUOR LICENCES

The next table shows the variations in the numbers of each type of licence in force at 30 June of each year.

LIQUOR LICENCES IN FORCE, QUEENSLAND
(Source: Queensland Licensing Commission)

Type	1978	1979	1980	1981	1982	1983
Licensed victualler	1,062	1,059	1,052	1,048	1,049	1,046
Tavern	18	22	30	36	40	45
Limited hotel	78	87	95	113	130	150
Resort (a)	21	23	25	27	28	32
<i>Licences (b) per 1,000 estimated resident population</i>	<i>0.54</i>	<i>0.54</i>	<i>0.53</i>	<i>0.52</i>	<i>0.52</i>	<i>0.51</i>
Bottler's	162	151	133	111	99	89
Cabaret	15	19	22	26	33	38
Ex-servicemen's club	60	61	61	63	64	66
Function room	21	26	29	30	31	33
Packet (coastal vessels)	20	27	29	39	50	58
Railway refreshment room (c)	15	13	12	12	12	11
Registered club (d)	146	161	172	181	187	198
Restaurant	278	328	369	402	457	513
Spirit merchant (retail)	9	12	13	12	15	16
Spirit merchant (other)	130	131	129	129	126	128
Sporting club	462	464	468	472	479	475
Other (e)	11	13	12	15	18	21
Total	2,508	2,597	2,651	2,716	2,818	2,919

(a) These licences may be granted for declared tourist areas on islands or other remote areas. (b) Comprising licensed victuallers, tavern, limited hotel, and resort licences. (c) Leased bars only. Excluding bars, rooms, and dining and club cars, etc. operated directly by the Commissioner for Railways (20 in 1983). (d) Registered clubs must supply meals. (e) Bistro, theatre, vigneron-vintner, workers' club, caterer, airport, cultural centre, and tourist park licences.

Although the number of licensed victuallers has remained virtually unchanged during the period, modern liberalisation of legislation in relation to the sale, supply, and consumption of liquor is reflected in the increase in most other licences.

For information on the jurisdiction of the Licensing Court refer to Section 2 of this chapter.

7 PUBLIC SAFETY

Fire Brigades

There are two controlling bodies responsible for fire fighting services throughout Queensland. The State Fire Services Council controls brigades set up under the *Fire Brigades Act* 1964-1982, and the Rural Fires Board, under provisions of the *Rural Fires Act* 1946-1982, administers bush fire brigades. In addition, as a safety precaution, a Local Authority may

establish a fire fighting brigade of its own, as do some major establishments such as the State Forestry Department and private companies.

Fire districts are constituted under the Fire Brigades Act. For each district there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is borne by the State Government, the relevant Local Authorities, and the contributory insurance companies and owners of property (which is insured with a company other than a contributory company), in proportions of one-eighth each by the State Government and the component Local Authorities, and three-quarters by the contributory companies and owners of property referred to.

Details of the activities of Fire Brigade Boards are given in the next table.

FIRE BRIGADE BOARDS, QUEENSLAND
(Source: State Fire Services Council)

Year	Boards	Stations	Staff		Calls during year	Expenditure (b)
			Permanent	Other (a)		
	No.	No.	No.	No.	No.	\$'000
1977-78	81	197	1,479	1,402	24,967	27,344
1978-79	81	199	1,513	1,470	29,045	29,019
1979-80	81	204	1,522	1,518	25,817	32,700
1980-81	81	202	1,560	1,594	24,089	37,611
1981-82	81	216	r 1,598	1,634	22,525	r 44,430
1982-83	81	221	1,624	1,692	(c) 27,106	50,934

(a) Including volunteers (42 in 1982-83).

(b) Excluding loan expenditure.

(c) Including 3,865 calls involving financial loss.

The activities of the 13 member Rural Fires Board, operating under the Rural Fires Act, fall into the three distinct categories of pre-fire measures, fire control, and post-fire analysis. For administrative purposes the State is divided into Rural Fire Districts under the control of a Chief Fire Warden, and in these districts fire wardens are appointed to assigned areas. These officers control the issuing of permits, reporting of fire hazards, and education in fire protection, while the bush fire brigades operate on a voluntary basis under the control of an appointed first officer. At 30 June 1983 there were 1,541 bush fire brigades. Expenditure by the State Government, including contributions by bush fire brigades for equipment, amounted to \$1,170,584 during 1982-83.

Surf Life Saving

Queensland beaches are patrolled at week-ends and during holiday periods by volunteer members of surf life saving clubs. As well as performing rescues, lifesavers provide first aid and other services. In 1982-83 total club membership was about 6,700. Clubs meet their operating costs through fund raising, donations, and government grants. The Queensland Government grant to the parent body, The Surf Life Saving Association (Queensland Division), in 1982-83 was \$1,378,000.

Some Local Authorities in Queensland employ beach inspectors who are qualified lifesavers and who carry out beach patrol activities particularly when the volunteer lifesavers are unavailable.

Protection from Sharks

A program designed to protect the public from attacks by sharks commenced in November 1962 and since its inception 25,757 sharks and 11,576 pups have been taken. For the season ended June 1983 the total catch was 986 sharks and 730 pups. Expenditure on shark protection for 1982-83 was \$496,100.

Road Safety Council

The Queensland Road Safety Council was established to assist in reducing road accidents by public educational campaigns to improve the knowledge, skill, attitudes, and habits of all classes of road users. It comprises representatives of Government Departments and private industry who are able to provide expert knowledge on matters of road safety. Expenditure by the Council in 1982–83 was \$1,287,800.

State Emergency Service

The Queensland State Emergency Service was established, as such, during 1974 with the aim of training, educating, organising, and co-ordinating the community to cope with disaster. It is manned by both volunteer and permanent staff and receives the support of Commonwealth, State, and Local Governments. Expenditure during the year 1982–83 was \$2,029,047.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Law and Order (4502.3) (*annual*)

Other Publications

Annual reports of the Licensing Commission, the Queensland Police Department, the Comptroller-General of Prisons, the Queensland Probation and Parole Service, the Parole Board, and the Department of Children's Services.

Chapter 10

HEALTH

1 PUBLIC HEALTH SERVICES

Public health administration is primarily concerned with the maintenance of good health within the community, and, to this end, provides a range of services which may be: preventive or protective, such as quarantine, immunisation, or food inspection; advisory, such as maternal and child welfare clinics; ancillary to the medical profession, such as pathological laboratories; or academic, such as research into the cause and nature of diseases. Most of these are provided by government authorities, either Commonwealth, State, or Local Government, but some are provided by non-profit organisations such as the Red Cross Society. The services provided by these bodies are outlined briefly below.

Commonwealth Government Services

The only direct health activity originally permitted to the Commonwealth Government by the Constitution was the quarantine service, and this service, covering human, animal, and plant quarantine, operates throughout Australia to prevent the introduction of diseases from overseas. The service is a major function of the Commonwealth Department of Health.

An amendment to the Constitution in 1946 permitted the Commonwealth Government to provide for pharmaceutical, hospital, and medical benefits, details of which are given in Chapter 11, Social Welfare, Section 7, and to make laws regarding medical and dental services.

In addition, the Commonwealth Government has exercised its powers under Section 96 of the Constitution to make grants to the States for health purposes, and also provides financial assistance to certain organisations concerned with public health matters.

The Commonwealth Department of Health is involved in a large number of activities including community, Aboriginal, and environmental health, epidemiology, drug evaluation and dependence, and medical services (anti-tuberculosis campaign, nursing, and medical, acoustic, and radiation laboratories). Details of these activities, including expenditure, are included in the publication *Year Book Australia*.

State Government Health Services

The State Government bears the prime responsibility for the provision and administration of the facilities and services necessary for the maintenance of community health and the prevention of disease. The State Government directly maintains the facilities and with Commonwealth Government assistance assumes financial responsibility for recognised (public) hospitals, most of which are administered by statutory District Boards. Details of these

residential facilities are given in Section 3 of this chapter. The Department of Aboriginal and Islanders Advancement operates hospitals and medical clinics in several mainland communities which do not have the services of a board hospital, and on most Torres Strait islands.

The State Health Department through its various divisions provides many essential services. Health hazards arising from occupational causes are investigated by the Occupational Health Unit of the Division of Environmental and Occupational Health, which provides advisory services as well as monitoring industries with specific occupational hazards.

The monitoring of the hazards associated with the use of ionising radiation and microwaves in medicine, industry, and research is carried out by the Division of Health and Medical Physics. This Division also acts as adviser in the assessment and purchasing of electro-medical equipment for recognised (public) hospitals and maintains diagnostic, X-ray, electromedical, and dental equipment.

Early detection of disease is sought through school health examinations, chest clinics, and mobile X-ray units, and the incidence is monitored by compulsory notification of cases of communicable diseases. Two illnesses have been added to the list of notifiable diseases, genital herpes and acquired immune deficiency syndrome (AIDS). No instances of these diseases were notified in Queensland during 1983. The next table illustrates the pattern of notifications of communicable diseases.

NOTIFICATIONS OF COMMUNICABLE DISEASES, QUEENSLAND
(Source: Queensland Department of Health)

Disease	1909-10	1919-20	1930	1940	1950	1960	1970	1980	1982 (a)
Amoebiasis	(b)	(b)	(b)	(b)	(b)	(b)	(b)	23	16
Diphtheria	552	2,841	1,686	598	172	6	1	1	—
Dysentery (baeillary)	n.a.	n.a.	4	19	244	47	65	131	86
Hansen's disease	(b)	(b)	8	30	1	2	1	5	10
Hepatitis (infective and serum)	(b)	(b)	(b)	(b)	(b)	713	1,000	203	338
Hookworm	1	5	10	18	62	82	2	66	13
Leptospirosis (c)	(b)	(b)	(b)	55	55	105	50	16	44
Malaria	(b)	9	9	10	24	57	71	207	212
Meningitis, cerebro-spinal	10	32	3	5	44	30	101	65	39
Poliomyelitis, acute anterior	(b)	17	4	44	106	6	—	—	—
Puerperal infections	11	26	40	152	19	29	9	3	1
Q fever	(b)	(b)	(b)	(b)	(b)	255	106	271	131
Rubella	(b)	(b)	(b)	(b)	6	12	72	95	67
Tetanus	n.a.	n.a.	n.a.	n.a.	n.a.	42	4	3	2
Tuberculosis	(b)	(b)	343	525	594	844	291	308	188
Typhoid fever (d)	760	731	130	53	9	7	2	1	3
Typhus fever	(b)	(b)	n.a.	33	53	13	2	—	10
Venereal diseases	n.a.	2,848	(e) 1,714	1,258	577	1,146	1,788	4,027	2,228
Other	n.a.	n.a.	622	283	665	572	282	316	638
Total	n.a.	n.a.	n.a.	3,083	2,631	3,968	3,847	5,741	4,026

(a) The basis of compilation has changed from date of notification to date of onset of disease. In addition, the figures have been supplemented with data provided by sources other than medical practitioners. (b) Not notifiable. (c) Including Weil's disease, Paraweil disease, and Seven-day fever. (d) Including Para-typhoid fever. (e) For year 1929-30.

The Drugs and Poisons Section supervises the marketing, distribution, and use of drugs, therapeutic substances, poisons, etc. to ensure compliance with relevant legislation.

The Section of Environmental Sanitation provides an inspectorial and advisory service to (i) examine dangerous toys and articles, (ii) evaluate standards of environmental sanitation, (iii) assist Local Authorities to carry out their duties and functions under the Health Act and Regulations, (iv) assist other units of government, and (v) monitor the quality of public water supplies.

The Section of Food Supervision is engaged in the inspection and sampling of foods to ensure compliance with prescribed standards and as an aid in the detection and prevention of the sale of adulterated foods. This Section oversees the work of Local Authorities in this area.

Advisory and preventive services cover the routine medical examinations of school children by the School Health Services. This service is provided for all pre-school and primary school children throughout the State. Static and mobile school dental clinics are provided throughout the State by the Division of Dental Services. Facilities for the training of school dental therapists, who will work with dentists to provide necessary treatment, have been established in Brisbane and Townsville.

A special geriatric unit at Princess Alexandra Hospital provides a modern assessment and rehabilitation service including a therapeutic day hospital.

The Queensland Radium Institute, attached to the Royal Brisbane Hospital, operates a chain of sub-centres throughout the State, studies and treats cancer, and maintains a Department of Nuclear Medicine. A Cancer Registry has been established in Queensland and cancer is now a notifiable disease under the Health Act.

The Division of Child Health offers a State-wide service to mothers, babies, infants, and school children. Over 350 urban centres throughout the State are serviced by 313 centres and sub-centres, 3 services attached to Royal Flying Doctor Service bases, and 10 mobile vans. Triple-certificated nursing sisters offer support to mothers with babies and provide health surveillance for the growing child. This surveillance continues in the pre-school, primary, and secondary schools.

Close co-operation exists between the Departments of Health, Education, and Welfare in an attempt to provide an integrated approach to health care delivery.

MATERNAL AND INFANT HEALTH SERVICE, QUEENSLAND
(Source: Annual Report of the Health and Medical Services)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Number of clinics	299	299	298	305	315	326
Brisbane Statistical Division ..	91	91	92	95	96	95
Rest of State (a)	208	208	206	210	219	231
Number of babies seen at clinics ..	26,393	26,492	26,698	28,533	30,753	32,058
Number of attendances	511,559	520,434	538,018	559,766	603,209	627,539
Brisbane Statistical Division ..	217,180	223,696	236,346	247,657	265,554	247,941
Rest of State	294,379	296,738	301,672	312,109	337,655	379,598

(a) Including three Flying Doctor bases.

The Division of Child Health also maintains three ante-natal clinics and three residential homes for the care and supervision of premature and frail babies, and those with feeding difficulties. Details of the homes are included with hospitals in Section 3 of this chapter.

Aboriginal health is provided for by a specialised unit within the Health Department with the primary aim of improving health by early detection and treatment and through health education. There are 31 health teams stationed throughout the State.

The Flying Surgeon Service, with bases at Longreach and Roma, makes routine and emergency visits to several hospitals in western Queensland. During 1982-83, 1,890 routine operations and 139 emergency operations were performed, and 5,083 other patients requiring specialist consultation were examined.

Services ancillary to the medical and health professions are provided by the Laboratory of Microbiology and Pathology, and by the Government Chemical Laboratory. The Laboratory of

Microbiology and Pathology provides a clinical pathology service for private practitioners and hospitals throughout the State, as well as conducting public health laboratory investigations and coronial autopsies. The Laboratory is a World Health Organisation/Food and Agriculture Organisation (WHO/F.A.O.) Leptospirosis Reference Centre.

The Government Chemical Laboratory provides a chemical analytical and advisory service for State and Commonwealth Government Departments. Fields of examination include food-stuffs, drugs, waters, toxicology, bio-chemistry, industrial hygiene, mining, mineralogy, paints, and textiles.

The Division of Health Promotion, in its efforts to improve the health of Queenslanders through education, makes use of the mass media, publications, films, displays, talks, and library services, and conducts health education programs.

Details of residential and out-patient services provided by the Psychiatric Services and the Youth, Welfare, and Guidance Divisions of the Health Department are given in Sections 3, 4, 5, and 7 of this chapter.

Local Authority Services

Local Authorities are responsible for food hygiene and environmental sanitation, which includes rodent control, mosquito eradication, and maintenance of camping areas. They also provide immunisation against diphtheria, whooping cough, tetanus, poliomyelitis, measles, and smallpox in children, and vaccination of adults against poliomyelitis and girls from 12 to 14 years against rubella. The Commonwealth Government supplies all serums and vaccines for immunisation and vaccination free of charge. The State Government subsidises any works designed to remove permanently the breeding places of mosquitoes.

Services by Other Organisations

The Commonwealth Serum Laboratories are Australia's chief suppliers of biological medicines, insulins, vaccines, penicillins, human blood fractions, BCG, and a large range of veterinary biological products. In addition, biological research into many kinds of human and veterinary disease is carried out in the fields of bacteriology, bio-chemistry, immunology, and virology.

The Environmental Control Council, under the *State Development and Public Works Organisation Act* 1971–1981, co-ordinates the work of State Departments, Local Authorities, Statutory Bodies, and all interested persons and associations. This work is directed towards the control of the environment and to ensure consistency in their respective policies and objectives. It maintains liaison with Local Authorities on environmental matters, continually reviews the state of the environment, and advises the government on environmental matters.

Legislation to control air pollution is contained in the *Clean Air Act* 1963–1981. This Act provides for licensing of scheduled industries, the investigation of complaints from the public regarding air pollution, and the maintenance of an air monitoring program throughout Queensland.

The Water Quality Control Council of Queensland was established under the *Clean Waters Act* 1971–1982 which is administered by the Minister for Water Resources and Maritime Services. The Council determines the condition for the licensing of premises which discharge effluent to water courses and is responsible for the specification of effluent and water standards. Some of the other legislation affecting water pollution control includes the *Water Act* 1926–1983, *Fisheries Act* 1976–1982, *Harbours Act* 1955–1982, *Mining Act* 1968–1983, *Pollution of Waters by Oil Act* 1973, and the *Irrigation Act* 1922–1983.

The *Litter Act* 1971–1978 provides for penalties up to \$300 to be imposed by the courts where littering occurs on a public place. Some Local Authority by-laws include provisions for 'on-the-spot' fines of \$20 for these offences.

In such statutes as the *Agricultural Standards Act* 1952–1981 and the *Agricultural Chemicals Distribution Control Act* 1966–1978 there are provisions for the control of misuse of pesticides.

Legislation against noise pollution which provides for persons responsible for noise above a set standard to be subject to fines is contained in the *Noise Abatement Act* 1978–1983.

Details of other health services provided by non-profit organisations are included in the relevant sections in this chapter.

2 PRIVATE PRACTITIONER SERVICES

Public health services are primarily concerned with preventive measures, while curative medicine and the treatment of ill-health are catered for by private practitioner services, public and private institutional care, and organised out-patient or domiciliary services.

The Royal Flying Doctor Service of Australia provides medical and dental services in isolated areas. The service is not conducted for profit; donations and government contributions cover much of the annual overhead and capital expenditure. Medical advice may be given by means of two-way radio or telephone, or a doctor is flown to the patient.

In Queensland the service operates from three air bases (Mount Isa, Cairns, and Charleville). During 1982–83 consultations numbered 34,428, including 9,066 by radio and telephone. In addition 1,631 flights were made involving a total of 910,479 kilometres, and 970 patients were transported to hospital. Subsidies and operational grants in 1982–83 amounted to \$633,000 from the State Government and \$614,466 from the Commonwealth Government. Capital grants from the Commonwealth Government amounted to \$46,250 and \$161,215 was received in donations.

Doctors, specialists, nurses, certain other medical and para-medical workers, and dentists are required to register annually with relevant statutory boards, and details of registrations are shown in the next table. It should be noted that the registration of a person does not necessarily mean that that person is in practice in Queensland; merely that the person is authorised to practise in the State.

REGISTRATION OF MEDICAL AND PARA-MEDICAL WORKERS, QUEENSLAND
(Source: Medical Board of Queensland)

Profession etc.	Number on register at 31 December					
	1978	1979	1980	1981	1982	1983
Medical practitioners (excluding specialists)	3,566	3,778	3,935	3,969	3,974	4,131
Medical specialists	1,340	1,400	1,500	1,584	1,675	1,747
Dentists	985	1,148	1,192	1,241	1,313	1,347
Dental specialists	73	73	77	82	87	93
Optometrists	217	228	257	281	298	313
Pharmacists	2,091	2,162	2,228	2,345	2,417	2,468
Psychologists	n.a.	182	287	381	450	500
Physiotherapists	818	893	994	1,105	1,190	1,275
Chiropodists	131	134	139	139	136	139
Chiropractors .. .. .	..	..	..	..	249	262
Occupational therapists .. .. .	..	..	..	..	256	399
Speech therapists .. .. .	..	..	..	..	170	272
Registered nurses (a)	17,451	18,250	18,817	20,494	21,630	22,588
Enrolled nurses	5,459	6,032	6,014	6,492	6,781	7,287

(a) Including 7,908 in 1978; 8,261 in 1979; 8,378 in 1980; 8,985 in 1981; 9,375 in 1982; and 9,793 in 1983 with more than one certificate.

3 IN-PATIENT OR RESIDENTIAL FACILITIES

Many of the establishments referred to in the following tables provide facilities for different classes of patients. However, in some cases, separate staff and financial details are not available and it has been necessary to classify the establishment according to its predominant activity.

Residential Health Facilities Establishments

Statistics in this section relate to residential health facilities establishments controlled or operated directly by the State Government or Statutory Hospital Boards and/or approved for hospital or nursing home benefits by the Commonwealth Department of Health. Within this category three types of establishments are distinguished as defined below, i.e. acute hospitals, nursing care homes, and personal care homes. In addition psychiatric institutions are separately defined.

Acute hospitals have been defined as establishments equipped with at least minimal surgical, obstetrical, and diagnostic facilities for the in-patient treatment of the sick and disabled, and which provide comprehensive qualified nursing services as well as other necessary professional services. They must have at least a full-time equivalent of 20 qualified or student nurses per 100 in-patients. Most of the patients have acute conditions or temporary ailments and the average stay per admission is relatively short.

Acute hospitals are classified as either *recognised* or *other*. Recognised hospitals include those approved by the Commonwealth Department of Health under the *Health Insurance Act* 1973. These hospitals are requested to provide free accommodation and treatment to certain categories of patients and to make charges at agreed rates in respect of other categories of patients. Other hospitals include those classed as private hospitals by the Commonwealth Department of Health under the *Health Insurance Act* 1973, as well as several hospitals not approved under this Act, to which right of admission is restricted.

Nursing care homes are defined as establishments which provide long-term care involving regular basic nursing care to chronically ill, frail, or handicapped persons. They must have a full-time equivalent of more than 10 qualified or student nurses for every 100 in-patients.

Personal care homes are defined as establishments which provide minimal nursing care to chronically ill, infirm, convalescent, or handicapped persons or to infants, and have a full-time equivalent of not less than 5 nor more than 10 qualified nurses for every 100 in-patients. The patients may be up and about but still require routine personal care and assistance with bathing, feeding, dressing, or getting about.

Psychiatric institutions are devoted exclusively to the treatment and care of in-patients with psychiatric, mental, or behavioural disorders, or of senile patients. Private hospitals approved under the Medibank agreement and catering primarily for patients with psychiatric or behavioural disorders are included with acute hospitals.

In addition residential psychiatric treatment is provided at special units set up within a number of establishments administered by District Hospital Boards. A special centre for the treatment of intellectually handicapped children of pre-school age is also attached to the Prince Charles Hospital, Chermside. The Children's Services Department administers the Wilson Youth Hospital as a psychiatric hospital for boys and girls with behavioural problems. The Security Patients Hospital at Wacol, for seriously mentally ill prisoners, is operated by the Prisons Department with professional services being provided through the Division of Psychiatric Services of the State Health Department.

The 57 District Hospital Boards administered 149 residential establishments in 1980-81 and 151 in 1981-82. In both years, included in these were 17 establishments which, on the basis of

their nurse/patient ratio, have been classified in the following tables as homes providing nursing or personal care, or in the next chapter as residential welfare homes, providing domiciliary care. Also 29 establishments in 1980-81 and 31 establishments in 1981-82, classified as out-patient clinics, are administered by the Hospital Boards. Each Board has from five to nine members, one of whom is elected by the Local Authorities within the area. The hospitals are grouped into 11 regions, each served by a base hospital, except for the Moreton region which has two base hospitals.

The following tables indicate the extent of activities at the various types of residential health facilities establishments. Some indication of the extent and type of care may be obtained by reference to the figures on staff per 100 in-patients.

RESIDENTIAL HEALTH FACILITIES ESTABLISHMENTS, QUEENSLAND, 1980-81

Particulars	Acute hospitals (a)		Nursing care and personal care homes	Psychiatric institutions
	Recognised	Other		
Controlling body				
Commonwealth Government	—	2	3	—
State Government	3	4	7	9
District Hospital Boards	132	—	16	—
Religious and other non-profit	3	28	92	—
Private enterprise	—	14	71	—
Total	138	48	189	9
Number of beds at 30 June 1981	12,224	3,533	12,299	2,874
In-patients at 1 July 1980	7,138	2,347	11,590	2,614
Admitted during year	375,231	120,985	9,100	5,394
Discharged during year	368,301	119,240	5,857	5,441
Died during year	6,594	1,712	3,059	134
In-patients at 30 June 1981	7,474	2,380	11,774	2,433
Males	3,527	925	3,519	1,665
Females	3,947	1,455	8,255	768
In-patient days during year	(b) 2,588,021	840,935	4,230,084	906,682
Average daily number resident	7,090	2,304	11,589	2,484
Staff (c) engaged				
Medical	1,304	93	16	43
Other professional and technical	2,071	134	194	192
Qualified and student nurses	7,286	1,812	1,428	792
Enrolled or pupil nurses, wardsmen, etc.	4,008	1,170	3,144	1,153
Administrative and clerical	1,727	396	356	211
Domestic	3,393	906	1,754	316
Maintenance, gardeners, other	960	133	286	243
Total	20,747	4,644	7,183	2,950
Staff (c) per 100 in-patients				
Medical	17.4	3.9	0.1	1.8
Other professional and technical	27.7	5.6	1.6	7.9
Qualified and student nurses	97.5	76.1	12.1	32.6
Enrolled or pupil nurses, wardsmen, etc.	53.6	49.2	26.7	47.4
Administrative and clerical	23.1	16.6	3.0	8.7
Domestic	45.4	38.1	14.9	13.0
Maintenance, gardeners, other	12.8	5.6	2.4	10.0
Total	277.6	195.1	61.0	121.2

(a) Staff figures include those engaged in out-patient centres maintained by recognised hospital boards.

(b) Including 2,077,582 in-patient

days in standard wards.

(c) Full-time staff plus the full-time equivalent of part-time staff engaged during the last week in 1980-81.

RESIDENTIAL HEALTH FACILITIES ESTABLISHMENTS, QUEENSLAND, 1981-82

Particulars	Acute hospitals (a)		Nursing care and personal care homes	Psychiatric institutions
	Recognised	Other		
Controlling body				
Commonwealth Government	1	—	3	—
State Government	3	4	7	9
District Hospital Boards	134	—	16	—
Religious and other non-profit	3	29	97	—
Private enterprise	—	15	76	—
Total	141	48	199	9
Number of beds at 30 June 1982	12,622	3,184	12,796	2,824
In-patients at 1 July 1981	7,842	2,113	11,714	2,462
Admitted during year	394,804	123,100	9,693	5,735
Discharged during year	387,860	121,523	5,765	5,749
Died during year	7,058	1,474	3,354	125
In-patients at 30 June 1982	7,728	2,216	12,288	2,323
Males	3,752	750	3,727	1,596
Females	3,976	1,466	8,561	727
In-patient days during year	(b) 2,720,196	757,206	4,332,793	872,180
Average daily number resident	7,453	2,075	11,871	2,390
Staff (c) engaged				
Medical	1,340	1	12	41
Other professional and technical	2,315	6	228	188
Qualified and student nurses	7,844	1,640	1,549	808
Enrolled or pupil nurses, wardsmen, etc.	4,822	880	3,399	1,118
Administrative and clerical	1,950	285	371	175
Domestic	3,532	842	1,795	243
Maintenance, gardeners, other	989	111	308	264
Total	22,790	3,763	7,663	2,837
Staff (c) per 100 in-patients				
Medical	17.3	—	0.1	1.8
Other professional and technical	30.0	0.3	1.9	8.1
Qualified and student nurses	101.5	74.0	12.6	34.8
Enrolled or pupil nurses, wardsmen, etc.	62.4	39.7	27.7	48.1
Administrative and clerical	25.2	12.9	3.0	7.5
Domestic	45.7	38.0	14.6	10.5
Maintenance, gardeners, other	12.8	5.0	2.5	11.4
Total	294.9	169.8	62.4	122.1

(a) Staff figures include those engaged in out-patient centres maintained by recognised hospital boards.

(b) Including 2,209,575 in-patient

days in standard wards.

(c) Full-time staff plus the full-time equivalent of part-time staff engaged during the last week in 1981-82.

Finances of Residential Health Facilities Establishments

Details of the finances of residential health facilities establishments are set out in the next tables. Most health services are subsidised in one form or another from government funds. In 1980-81 the Commonwealth Government subsidised hospitals and nursing homes directly through its Medibank program, and Nursing Home Benefits and Pharmaceutical Benefits Schemes. However, benefits payable by the Commonwealth Government directly to patients through hospital benefits organisations are not included in the tables below. Where benefits are collected by hospitals or nursing homes on behalf of their patients, they are shown as patients' fees. The State Government gives assistance by the subsidisation of recognised hospitals through its Hospital Administration Fund and through operating subsidies to some other establishments.

On 1 September 1981 new Commonwealth funding of hospitals arrangements were introduced in most States to replace the Medibank cost-sharing agreements. The new arrangements for 1981-82 were in the form of providing health grants to the States as part of the tax-sharing agreements. Nursing Home Benefits and Pharmaceutical Benefits Schemes remained the same as in previous years.

FINANCES OF RESIDENTIAL HEALTH FACILITIES ESTABLISHMENTS, QUEENSLAND, 1980-81

Particulars	Acute hospitals		Nursing care and personal care homes	Psychiatric institutions
	Recognised (a)	Other (b)		
	\$'000	\$'000	\$'000	\$'000
Operating account receipts				
Subsidies, benefits, or direct payments from				
Commonwealth Government	131,022	34,747	69,019	2,460
State Government	166,400	1,159	11,696	44,606
Local Government	—	—	5	—
Parent body	—	24	26	—
Patients' fees	26,674	54,079	46,376	3,950
Public subscription, fund raising, donations	—	134	644	—
Property and investment income	6,714	1,226	1,166	—
Sales of goods or services	106	710	345	19
Total receipts	330,916	92,082	129,277	51,035
Operating account expenditure				
Salaries and wages	236,277	62,883	97,503	42,515
Provisions	10,175	3,249	8,352	2,492
Medicaments and appliances	27,871	5,114	1,151	459
Management, establishment, and domestic costs	30,481	9,898	15,457	4,801
Renewals, maintenance, repairs to plant, equipment, etc.	11,106	3,324	2,453	776
Interest on loans	17,204	4,428	1,353	—
Depreciation	—	1,843	834	—
Total gross expenditure	333,112	90,738	127,104	51,044
<i>Less</i> Board and lodging paid by staff	2,196	274	199	8
Total operating expenditure	330,916	90,464	126,904	51,035
Operating cost per in-patient day	\$ 127.86	\$ 107.58	\$ 30.00	\$ 56.29

(a) Operating account figures exclude the operating cost of ancillary services.

(b) Operating account figures include the operating cost of ancillary services.

FINANCES OF RESIDENTIAL HEALTH FACILITIES ESTABLISHMENTS, QUEENSLAND, 1981-82

Particulars	Acute hospitals		Nursing care and personal care homes	Psychiatric institutions
	Recognised (a)	Other (b)		
	\$'000	\$'000	\$'000	\$'000
Operating account receipts				
Subsidies, benefits, or direct payments from				
Commonwealth Government	(c) 367,736	13,898	89,467	1,659
State Government		1,584	13,024	52,211
Local Government		—	1	—
Parent body	—	14	8	—
Patients' fees	40,866	73,875	46,170	4,370
Public subscription, fund raising, donations	—	86	787	—
Property and investment income	12,013	1,466	1,601	—
Sales of goods or services		35	71	—
Total receipts	420,615	90,959	151,130	58,240

FINANCES OF RESIDENTIAL HEALTH FACILITIES ESTABLISHMENTS, QUEENSLAND, 1981-82—continued

Particulars	Acute hospitals		Nursing care and personal care homes	Psychiatric institutions
	Recognised (a)	Other (b)		
	\$'000	\$'000	\$'000	\$'000
Operating account expenditure				
Salaries and wages	300,789	52,834	114,814	48,629
Provisions	12,246	3,126	9,360	2,900
Medicaments and appliances	34,597	3,748	1,310	511
Management, establishment, and domestic costs	37,815	12,127	17,730	4,809
Renewals, maintenance, repairs to plant, equipment, etc.	15,214	2,242	2,782	1,393
Interest on loans	22,452	5,145	2,539	—
Depreciation	—	1,966	856	—
Total gross expenditure	423,113	81,188	149,392	58,242
Less Board and lodging paid by staff	2,498	172	169	2
Total operating expenditure	420,615	81,017	149,223	58,240
Operating cost per in-patient day	\$ 154.63	\$ 106.99	\$ 34.44	\$ 66.78

(a) Operating account figures exclude the operating cost of ancillary services.
ancillary services.

(b) Operating account figures include the operating cost of

(c) Commonwealth-State split is no longer available.

Facilities Available in Residential Health Establishments

PATIENTS IN RESIDENTIAL ESTABLISHMENTS, QUEENSLAND, AT 1 JULY 1981

Type or condition of in-patients	Acute hospitals (a)	Nursing care homes	Personal care homes	All establishments		
				Adults	Children	Persons
Condition of short-term patients						
Acute medical	3,415	91	27	3,106	427	3,533
Acute orthopaedic	823	1	—	770	54	824
Acute other surgical	2,320	1	—	2,108	213	2,321
Obstetric	923	—	—	923	—	923
Short-term psychiatric or behavioural	540	—	—	526	14	540
Other specialty	654	—	—	612	42	654
Total	8,675	93	27	8,045	750	8,795
Condition of long-stay patients						
Long-term orthopaedic	150	46	9	202	3	205
Long-stay geriatric	615	5,549	1,018	7,182	—	7,182
Long-stay psychiatric or behavioural	640	86	12	736	2	738
Physically handicapped	82	325	21	265	163	428
Intellectually handicapped	102	187	20	194	115	309
Other	100	101	29	218	12	230
Total	1,689	6,294	1,109	8,797	295	9,092
Persons receiving personal care						
Aged or infirm persons	605	2,024	1,152	3,781	—	3,781
Physically handicapped	20	162	24	152	54	206
Intellectually handicapped	900	157	35	878	214	1,092
Dependent children, infants	3	23	4	—	30	30
Other	419	88	141	383	265	648
Total	1,947	2,454	1,356	5,194	563	5,757
Persons provided with accommodation without nursing or personal care	107	35	384	526	—	526
All patients	12,418	8,876	2,876	22,562	1,608	24,170

(a) Including psychiatric institutions.

PATIENTS IN RESIDENTIAL ESTABLISHMENTS, QUEENSLAND, AT 30 JUNE 1982

Type or condition of in-patients	Acute hospitals (a)	Nursing care homes	Personal care homes	All establishments		
				Adults	Children	Persons
Condition of short-term patients						
Acute medical	3,876	35	10	3,489	432	3,921
Acute orthopaedic	810	—	—	765	45	810
Acute other surgical	2,155	—	—	2,010	145	2,155
Obstetric	903	—	—	903	—	903
Short-term psychiatric or behavioural	497	—	—	490	7	497
Other specialty	674	1	—	552	123	675
Total	8,915	36	10	8,209	752	8,961
Condition of long-stay patients						
Long-term orthopaedic	110	42	3	151	4	155
Long-stay geriatric	627	5,986	1,167	7,780	—	7,780
Long-stay psychiatric or behavioural	527	89	23	639	—	639
Physically handicapped	72	375	14	260	201	461
Intellectually handicapped	122	178	4	207	97	304
Other	44	113	—	146	11	157
Total	1,502	6,783	1,211	9,183	313	9,496
Persons receiving personal care						
Aged or infirm persons	495	2,410	854	3,759	—	3,759
Physically handicapped	12	158	3	150	23	173
Intellectually handicapped	873	96	19	869	119	988
Dependent children, infants	—	39	—	—	39	39
Other	373	113	110	373	223	596
Total	1,753	2,816	986	5,151	404	5,555
Persons provided with accommodation without nursing or personal care						
	97	50	396	542	1	543
All patients	12,267	9,685	2,603	23,085	1,470	24,555

(a) Including psychiatric institutions.

Separate details have been collected on the types of patients treated on the first Wednesday in July 1981 and on the last Wednesday in June 1982 and these have been aggregated in the tables above for all establishments.

Geographical Distribution of Hospitals and Nursing Homes

The State Department of Health is responsible for maintaining hospital services at sufficient levels throughout the State. In remote areas, hospitals must be maintained for the immediate and short-term treatment of patients who may be later transferred to base hospitals. As such patients are relatively few and their average stay is short, the cost per patient-day is relatively high compared with the level of costs in more densely settled areas. Costs in the Brisbane Statistical Division also tend to be higher because of the expensive equipment in the major hospitals in Brisbane, to which patients may be transferred from other areas for specialised treatment.

Details of the activities and unit costs of hospitals and nursing and personal care homes in each Statistical Division of the State are available from the ABS publication *Health and Welfare Establishments* (Catalogue No. 4302.3).

4 PATIENTS TREATED IN HOSPITALS

In the following pages particulars are given of in-patients treated in Queensland recognised (public) hospitals (other than psychiatric institutions), in private hospitals licensed by the State

Health Department, and in repatriation hospitals. Data are made available by the Queensland Department of Health for this purpose. Included are all patients who left hospital during the year shown, whether by discharge, transfer, or death. Patients still in hospital at the end of the year are included in figures for the year in which their period in hospital ended.

The principal disease or condition selected for classification is the one which best characterises the period of hospitalisation. The classification used is the International Classification of Diseases (1975 revision).

The next table shows the sex and age distribution of patients. When normal maternity cases (27,494) are excluded, female cases comprised 55 per cent of the patients treated in private hospitals and 48 per cent of patients treated in public hospitals in 1981. Male cases in the 0 to 9 years group and those aged 50 years and over outnumbered female cases in both public and private hospitals; female cases outnumbered males in both types of institutions in the remaining age groups.

Data on patients discharged from repatriation hospitals (11,100 in 1980 and 10,646 in 1981) have been included with private hospital patients.

PATIENTS TREATED IN RECOGNISED (PUBLIC) AND PRIVATE (a) HOSPITALS, QUEENSLAND

Age group (years)	Recognised (public)			Private			Percentage of patients treated in private hospitals	
	Males	Females	Persons	Males	Females	Persons	Males	Females
1980								
0-9	30,775	21,645	52,420	7,258	5,149	12,407	19.08	19.22
10-19	18,111	20,637	38,748	3,632	4,377	8,009	16.70	17.50
20-29	20,912	48,038	68,950	3,998	15,845	19,843	16.05	24.80
30-39	16,280	25,930	42,210	4,879	14,701	19,580	23.06	36.18
40-49	15,653	16,345	31,998	4,479	9,049	13,528	22.25	35.63
50-59	22,731	18,233	40,964	6,916	7,434	14,350	23.33	28.96
60-69	20,750	17,532	38,282	8,402	6,185	14,587	28.82	26.08
70 and over	21,885	20,318	42,203	7,689	8,664	16,353	26.00	29.89
All ages	167,097	188,678	355,775	47,253	71,404	118,657	22.04	27.45
1981								
0-9	30,318	20,891	51,209	7,102	4,676	11,778	18.98	18.29
10-19	18,459	21,369	39,828	3,969	4,473	8,442	17.70	17.31
20-29	21,504	50,829	72,333	4,355	17,141	21,496	16.84	25.22
30-39	16,994	28,199	45,193	5,596	15,403	20,999	24.77	35.33
40-49	16,349	17,326	33,675	4,870	9,019	13,889	22.95	34.23
50-59	23,074	18,989	42,063	7,082	7,866	14,948	23.48	29.29
60-69	22,492	18,939	41,431	9,696	6,851	16,547	30.12	26.56
70 and over	23,101	21,958	45,059	8,842	9,854	18,696	27.68	30.98
All ages	172,291	198,500	370,791	51,512	75,283	126,795	23.02	27.50

(a) Including repatriation hospitals.

The following tables show patients discharged according to the principal disease or condition treated in hospital and patients treated by age, sex, and period of treatment.

Children aged 0 to 9 years comprised 17 per cent of males and 9 per cent of females discharged in 1981. The high numbers in this age group were due principally to children receiving treatment for diseases of the respiratory system, this disease group accounting for 16,439, or 26 per cent, of discharges of children under 10 years. Patients aged 70 years and over numbered 63,755, or approximately 13 per cent of discharges. While patients aged 70 years and over represented over 45 per cent of the population in their age group, child patients under 10 years of age represented only 16 per cent of their age group. Normal delivery and complications of pregnancy, childbirth, and the puerperium accounted for 54,343, or about 40 per cent of the

female cases in the age groups 10 to 39 years, whereas accidents were the main cause of hospitalisation of males in the same age groups. The accidents, poisonings, and violence category accounted for 19,681, or 28 per cent, of all male discharges at these ages compared with 7,905, representing 5.8 per cent of female discharges of the 10 to 39 years age groups.

PATIENTS TREATED IN HOSPITALS, QUEENSLAND, 1980

Principal condition treated (International Classification, 1975 revision)	Patients treated				Rate (b)	
	Recognised (public)		Private (a)		Public	Private
	Males	Females	Males	Females		
<i>Infectious and parasitic</i>	4,073	3,626	615	729	33.95	5.93
Intestinal infections	1,993	1,815	194	177	16.79	1.64
Tuberculosis	155	71	13	3	1.00	0.07
<i>Neoplasms</i>	8,586	7,307	3,635	3,625	70.09	32.02
Lymphatic, haematopoietic tissue	944	533	236	209	6.51	1.96
Other malignant neoplasms	6,546	4,805	2,721	2,342	50.06	22.33
<i>Endocrine, nutrition, and metabolic</i>	2,033	2,506	528	779	20.02	5.76
Diabetes mellitus	979	1,202	316	312	9.62	2.77
<i>Blood and blood-forming organs</i>	1,106	990	253	338	9.24	2.61
<i>Mental disorders</i>	7,148	6,737	2,232	4,116	61.23	27.99
<i>Nervous system and sense organs</i>	8,849	7,941	3,881	3,793	74.04	33.84
<i>Circulatory system</i>	16,229	12,314	4,472	4,341	125.87	38.86
Chronic rheumatic heart disease	132	182	10	7	1.38	0.07
Hypertensive disease	741	897	263	432	7.22	3.06
Ischaemic heart disease	5,843	3,172	1,067	694	39.76	7.77
Other forms of heart disease	3,746	2,987	904	851	29.69	7.74
Cerebrovascular disease	2,546	2,046	741	698	20.25	6.35
<i>Respiratory system</i>	19,275	13,878	5,707	4,972	146.20	47.09
Acute respiratory infections	3,647	2,661	535	481	27.82	4.48
Influenza	132	172	68	144	1.34	0.93
Pneumonia	2,328	1,490	405	367	16.84	3.40
Bronchitis, emphysema, and asthma	6,538	4,993	1,071	890	50.85	8.65
Chronic diseases of tonsils and adenoids	1,666	1,802	1,864	1,824	15.29	16.26
<i>Digestive system</i>	16,247	13,110	6,623	6,495	129.46	57.85
Peptic ulcer	1,362	681	390	240	9.01	2.78
Appendicitis	2,042	1,726	894	1,134	16.62	8.94
Intestinal obstruction and hernia	3,975	1,729	2,036	864	25.15	12.79
Cirrhosis of liver	383	244	80	39	2.77	0.52
Disorders of gallbladder	991	2,387	367	729	14.90	4.83
<i>Genito-urinary systems</i>	7,586	17,665	2,894	12,870	111.36	69.52
Nephritis, nephrotic syndrome, and nephrosis (c)	970	1,201	117	119	9.57	1.04
Infections of kidney	127	467	36	101	2.62	0.60
Calculus of urinary system	576	320	205	108	3.95	1.38
Hyperplasia of prostate	1,512	—	937	—	6.67	4.13
Diseases of breast	90	1,491	58	1,504	6.97	6.89
Other diseases of genital organs	1,833	11,758	835	10,089	59.94	48.17
<i>Pregnancy, childbirth, and puerperium</i>	—	41,164	—	9,108	181.53	40.17
Complications of above	—	20,336	—	4,287	89.68	18.91
<i>Skin and subcutaneous tissue</i>	4,204	3,040	1,435	1,413	31.95	12.56
<i>Musculoskeletal system and connective tissue</i>	8,400	7,194	4,022	3,814	68.77	34.56
<i>Congenital anomalies</i>	1,957	1,326	524	521	14.48	4.61
<i>Certain perinatal conditions</i>	719	587	167	127	5.76	1.30
<i>Symptoms, signs, and ill-defined</i>	14,594	13,792	3,109	3,785	125.18	30.40
<i>Injury and poisoning</i>	28,656	15,154	3,161	2,549	193.20	25.18
<i>Supplementary classifications (d)</i>	17,435	20,347	3,995	8,029	166.62	53.03
All classes	167,097	188,678	47,253	71,404	1,568.95	523.27

(a) Including repatriation hospitals, below in *Supplementary classifications*, current complaint or illness.

(b) Patients per 10,000 mean resident population.

(c) Renal dialysis episodes are included

(d) Examinations, investigations, etc., without reported diagnosis, and special cases without

PATIENTS TREATED IN HOSPITALS, QUEENSLAND, 1981

Principal condition treated (International Classification, 1975 revision)	Patients treated				Rate (b)	
	Recognised (public)		Private (a)			
	Males	Females	Males	Females	Public	Private
<i>Infectious and parasitic</i>	4,150	3,744	677	779	33.67	6.21
Intestinal infections	2,009	1,865	179	193	16.52	1.59
Tuberculosis	122	50	11	2	0.73	0.06
<i>Neoplasms</i>	9,118	7,588	4,112	4,066	71.25	34.88
Lymphatic, haematopoietic tissue	883	589	353	238	6.28	2.52
Other malignant neoplasms	6,956	4,951	2,919	2,509	50.78	23.15
<i>Endocrine, nutrition, and metabolic</i>	2,034	2,595	535	871	19.74	6.00
Diabetes mellitus	980	1,264	329	368	9.57	2.97
<i>Blood and blood-forming organs</i>	1,149	926	322	303	8.85	2.67
<i>Mental disorders</i>	7,022	6,695	2,383	4,065	58.50	27.50
<i>Nervous system and sense organs</i>	8,908	8,026	4,286	4,091	72.23	35.73
<i>Circulatory system</i>	17,461	13,108	4,797	4,409	130.38	39.26
Chronic rheumatic heart disease	95	152	2	6	1.05	0.03
Hypertensive disease	707	879	246	402	6.76	2.76
Ischaemic heart disease	6,683	3,499	1,092	683	43.43	7.57
Other forms of heart disease	4,102	3,085	1,047	912	30.65	8.36
Cerebrovascular disease	2,450	2,339	791	780	20.43	6.70
<i>Respiratory system</i>	18,008	13,055	5,333	4,306	132.49	41.11
Acute respiratory infections	3,287	2,346	520	422	24.03	4.02
Influenza	100	122	25	71	0.95	0.41
Pneumonia	2,205	1,418	452	361	15.45	3.47
Bronchitis, emphysema, and asthma	6,000	4,936	1,106	904	46.64	8.57
Chronic diseases of tonsils and adenoids	1,206	1,326	1,315	1,203	10.80	10.74
<i>Digestive system</i>	16,534	13,760	7,194	7,001	129.21	60.54
Peptic ulcer	1,501	768	414	263	9.68	2.89
Appendicitis	1,964	1,683	884	1,081	15.55	8.38
Intestinal obstruction and hernia	3,907	1,837	2,337	885	24.50	13.74
Cirrhosis of liver	402	218	73	24	2.64	0.41
Disorders of gallbladder	978	2,486	511	1,079	14.77	6.78
<i>Genito-urinary systems</i>	7,613	18,543	3,209	13,622	111.56	71.79
Nephritis, nephrotic syndrome, and nephrosis (c)	873	1,014	141	198	8.05	1.45
Infections of kidney	122	484	22	95	2.58	0.50
Calculus of urinary system	684	344	223	106	4.38	1.40
Hyperplasia of prostate	1,397	—	924	—	5.96	3.94
Diseases of breast	117	1,502	64	1,485	6.91	6.61
Other diseases of genital organs	1,952	12,772	954	10,677	62.80	49.61
<i>Pregnancy, childbirth, and puerperium</i>	—	44,390	—	9,953	189.33	42.45
Complications of above	—	22,075	—	4,774	94.15	20.36
<i>Skin and subcutaneous tissue</i>	4,257	3,021	1,425	1,424	31.04	12.15
<i>Musculoskeletal system and connective tissue</i>	8,716	7,742	4,592	4,367	70.20	38.21
<i>Congenital anomalies</i>	1,994	1,305	591	452	14.07	4.45
<i>Certain perinatal conditions</i>	831	635	217	171	6.25	1.65
<i>Symptoms, signs, and ill-defined</i>	14,804	13,953	3,904	4,316	122.65	35.06
<i>Injury and poisoning</i>	29,173	15,580	3,349	2,841	190.88	26.40
<i>Supplementary classifications (d)</i>	20,519	23,834	4,586	8,246	189.17	54.73
All classes	172,291	198,500	51,512	75,283	1,581.47	540.80

(a) Including repatriation hospitals.
below in *Supplementary classifications*.
current complaint or illness.

(b) Patients per 10,000 mean resident population.

(c) Renal dialysis episodes are included

(d) Examinations, investigations, etc., without reported diagnosis, and special cases without

MALE PATIENTS TREATED IN HOSPITALS BY AGE GROUPS, QUEENSLAND, 1980

Principal condition treated (International Classification, 1975 revision)	Age group (years)								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 and over	
<i>Infectious and parasitic</i>	2,463	527	528	302	223	236	165	244	4,688
Intestinal infections	1,687	129	123	70	37	42	33	66	2,187
Tuberculosis	1	4	8	10	41	43	24	37	168
<i>Neoplasms</i>	442	342	390	580	988	2,516	3,353	3,610	12,221
Lymphatic, haematopoietic tissue	216	96	82	62	48	180	249	247	1,180
Other malignant neoplasms ..	80	94	166	337	711	2,016	2,758	3,105	9,267
<i>Endocrine, nutrition, and metabolic</i>	275	195	237	232	277	465	442	438	2,561
Diabetes mellitus	36	94	138	116	139	267	246	259	1,295
<i>Blood and blood-forming organs</i>	333	217	80	63	57	128	188	293	1,359
<i>Mental disorders</i>	130	603	1,940	1,760	1,605	1,615	991	736	9,380
<i>Nervous system and sense organs</i>	3,695	1,201	1,067	1,100	995	1,306	1,636	1,730	12,730
<i>Circulatory system</i>	91	218	583	1,176	2,243	4,434	5,507	6,449	20,701
Chronic rheumatic heart disease	3	6	23	18	32	29	21	10	142
Hypertensive disease	1	15	49	92	176	293	232	146	1,004
Ischaemic heart disease	—	3	25	271	866	1,923	2,049	1,773	6,910
Other heart disease	46	59	134	200	349	739	1,135	1,988	4,650
Cerebrovascular disease ..	5	11	39	78	199	506	993	1,456	3,287
<i>Respiratory system</i>	11,911	2,251	1,327	1,047	990	1,805	2,331	3,320	24,982
Acute respiratory infections ..	3,250	317	126	68	54	88	115	164	4,182
Influenza	28	28	25	24	16	17	23	39	200
Pneumonia	855	148	118	150	160	260	326	716	2,733
Bronchitis, emphysema, and asthma	4,247	747	224	225	250	515	670	731	7,609
Chronic diseases of tonsils and adenoids	2,689	497	217	80	21	16	6	4	3,530
<i>Digestive system</i>	2,953	2,328	2,603	2,564	2,676	3,555	3,242	2,949	22,870
Peptic ulcer	2	25	141	214	302	428	333	307	1,752
Appendicitis	339	1,311	622	299	155	94	65	51	2,936
Intestinal obstruction and hernia	907	206	436	560	693	1,115	1,102	992	6,011
Cirrhosis of liver	1	2	25	58	115	156	78	28	463
Disorders of gallbladder ..	5	16	82	145	202	285	318	305	1,358
<i>Genito-urinary system</i>	1,263	716	739	787	792	1,504	2,243	2,436	10,480
Nephritis, nephrotic syndrome, and nephrosis (a)	103	118	122	76	65	214	261	128	1,087
Infections of kidney	7	16	22	22	17	26	30	23	163
Calculus of urinary system ..	—	8	59	127	151	185	157	94	781
Hyperplasia of prostate	—	1	9	16	56	359	902	1,106	2,449
Diseases of breast	2	39	32	18	14	18	10	15	148
Other diseases of genital organs	881	363	277	271	203	240	231	202	2,668
<i>Pregnancy, childbirth, and puerperium</i>	—	—	—	—	—	—	—	—	—
Complications of above	—	—	—	—	—	—	—	—	—
<i>Skin and subcutaneous tissue ..</i>	734	895	932	686	499	716	584	593	5,639
<i>Musculoskeletal system and connective tissue</i>	547	1,145	2,098	2,295	1,904	1,905	1,496	1,032	12,422
<i>Congenital anomalies</i>	1,573	450	116	110	55	83	62	32	2,481
<i>Certain perinatal conditions ..</i>	885	1	—	—	—	—	—	—	886
<i>Symptoms, signs, and ill-defined</i>	3,376	1,901	1,737	1,779	1,906	2,245	2,369	2,390	17,703
<i>Injury and poisoning</i>	5,373	7,600	7,779	3,817	2,385	2,069	1,413	1,381	31,817
<i>Supplementary classifications (b)</i>	1,989	1,153	2,754	2,861	2,537	5,065	3,130	1,941	21,430
All classes	38,033	21,743	24,910	21,159	20,132	29,647	29,152	29,574	214,350

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

MALE PATIENTS TREATED IN HOSPITALS BY AGE GROUPS, QUEENSLAND, 1981

Principal condition treated (International Classification, 1975 revision)	Age group (years)								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 and over	
<i>Infectious and parasitic</i>	2,500	544	569	287	196	261	238	232	4,827
Intestinal infections	1,632	130	131	57	43	62	52	81	2,188
Tuberculosis	5	2	6	19	19	29	23	30	133
<i>Neoplasms</i>	504	432	483	810	1,091	2,442	3,606	3,862	13,230
Lymphatic, haematopoietic tissue	229	123	82	75	90	138	232	267	1,236
Other malignant neoplasms ..	92	138	214	472	744	1,915	2,993	3,307	9,875
<i>Endocrine, nutrition, and metabolic</i>	243	208	197	224	256	461	485	495	2,569
Diabetes mellitus	41	96	87	105	136	269	282	293	1,309
<i>Blood and blood-forming organs</i>	377	243	81	59	69	128	191	323	1,471
<i>Mental disorders</i>	257	737	1,756	1,801	1,459	1,536	1,047	812	9,405
<i>Nervous system and sense organs</i>	3,642	1,155	1,141	1,160	1,056	1,350	1,733	1,957	13,194
<i>Circulatory system</i>	115	228	541	1,170	2,224	4,771	6,188	7,021	22,258
Chronic rheumatic heart disease	—	2	15	11	25	18	21	5	97
Hypertensive disease	7	14	40	90	148	286	226	142	953
Ischaemic heart disease	—	1	22	242	983	2,194	2,323	2,010	7,775
Other heart disease	69	45	130	228	289	766	1,364	2,258	5,149
Cerebrovascular disease	5	28	25	58	158	528	958	1,481	3,241
<i>Respiratory system</i>	10,090	2,323	1,354	1,087	970	1,653	2,497	3,367	23,341
Acute respiratory infections ..	2,968	286	114	81	50	64	102	142	3,807
Influenza	29	20	23	8	9	8	13	15	125
Pneumonia	827	193	128	135	154	237	322	661	2,657
Bronchitis, emphysema, and asthma	3,625	858	294	250	271	449	649	710	7,106
Chronic diseases of tonsils and adenoids	1,774	431	191	94	13	8	7	3	2,521
<i>Digestive system</i>	3,195	2,273	2,627	2,789	2,687	3,608	3,402	3,147	23,728
Peptic ulcer	3	29	149	229	302	456	386	361	1,915
Appendicitis	303	1,201	629	366	137	96	75	41	2,848
Intestinal obstruction and hernia	924	227	437	596	693	1,152	1,171	1,044	6,244
Cirrhosis of liver	5	—	20	60	104	161	104	21	475
Disorders of gallbladder	1	15	78	159	214	304	368	350	1,489
<i>Genito-urinary system</i>	1,289	741	789	730	847	1,621	2,286	2,519	10,822
Nephritis, nephrotic syndrome, and nephrosis (a)	107	87	64	85	70	265	175	161	1,014
Infections of kidney	9	18	19	12	18	14	23	31	144
Calculus of urinary system ..	3	8	62	106	200	244	180	104	907
Hyperplasia of prostate	1	—	1	7	55	318	903	1,036	2,321
Diseases of breast	6	46	24	18	17	28	26	16	181
Other diseases of genital organs	860	410	373	267	225	298	260	213	2,906
<i>Pregnancy, childbirth, and puerperium</i>	—	—	—	—	—	—	—	—	—
Complications of above	—	—	—	—	—	—	—	—	—
<i>Skin and subcutaneous tissue ..</i>	744	852	987	657	570	662	625	585	5,682
<i>Musculoskeletal system and connective tissue</i>	556	1,255	2,406	2,398	1,927	1,966	1,634	1,166	13,308
<i>Congenital anomalies</i>	1,681	436	147	62	59	67	84	49	2,585
<i>Certain perinatal conditions ..</i>	1,048	—	—	—	—	—	—	—	1,048
<i>Symptoms, signs, and ill-defined</i>	3,691	1,928	1,716	1,804	2,028	2,432	2,489	2,620	18,708
<i>Injury and poisoning</i>	5,311	7,658	7,951	4,072	2,413	2,153	1,538	1,426	32,522
<i>Supplementary classifications (b)</i>	2,182	1,415	3,114	3,477	3,367	5,044	4,145	2,361	25,105
All classes	37,425	22,428	25,859	22,587	21,219	30,155	32,188	31,942	223,803

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

FEMALE PATIENTS TREATED IN HOSPITALS BY AGE GROUPS, QUEENSLAND, 1980

Principal condition treated (International Classification, 1975 revision)	Age group (years)								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 and over	
<i>Infectious and parasitic</i>	1,903	648	575	307	197	218	210	297	4,355
Intestinal infections	1,304	146	149	71	60	76	71	115	1,992
Tuberculosis	5	—	13	6	6	11	17	16	74
<i>Neoplasms</i>	347	438	693	1,137	1,628	2,095	2,324	2,270	10,932
Lymphatic, haematopoietic tissue	124	69	41	25	71	88	163	161	742
Other malignant neoplasms ..	66	80	208	549	939	1,576	1,849	1,880	7,147
<i>Endocrine, nutrition, and metabolic</i>	260	271	310	357	379	453	569	686	3,285
Diabetes mellitus	40	129	119	119	138	233	321	415	1,514
<i>Blood and blood-forming organs</i>	219	168	91	72	116	138	183	341	1,328
<i>Mental disorders</i>	87	746	1,994	2,292	1,730	1,616	1,178	1,210	10,853
<i>Nervous system and sense organs</i>	2,817	967	1,078	1,243	1,063	1,279	1,330	1,957	11,734
<i>Circulatory system</i>	88	141	579	1,339	1,648	2,496	3,813	6,551	16,655
Chronic rheumatic heart disease	7	4	14	29	39	56	34	6	189
Hypertensive disease	2	11	44	120	225	282	310	335	1,329
Ischaemic heart disease	—	1	8	60	239	648	1,274	1,636	3,866
Other heart disease	42	35	100	178	222	429	769	2,063	3,838
Cerebrovascular disease	8	14	20	61	125	297	649	1,570	2,744
<i>Respiratory system</i>	7,800	2,413	1,717	1,167	1,007	1,322	1,486	1,938	18,850
Acute respiratory infections ..	2,000	342	208	134	73	120	114	151	3,142
Influenza	26	17	35	47	40	40	44	67	316
Pneumonia	570	103	99	100	108	171	234	472	1,857
Bronchitis, emphysema, and asthma	2,430	645	585	383	410	445	487	498	5,883
Chronic diseases of tonsils and adenoids	2,212	961	346	71	15	8	8	5	3,626
<i>Digestive system</i>	2,084	2,469	3,211	2,291	2,048	2,276	2,343	2,883	19,605
Peptic ulcer	6	13	62	102	129	164	178	267	921
Appendicitis	301	1,233	679	312	135	80	67	53	2,860
Intestinal obstruction and hernia	377	76	191	296	338	387	395	533	2,593
Cirrhosis of liver	5	7	37	31	49	73	62	19	283
Disorders of gallbladder	—	131	628	488	478	476	466	449	3,116
<i>Genito-urinary system</i>	538	1,867	7,548	7,747	5,680	3,695	1,995	1,465	30,535
Nephritis, nephrotic syndrome, and nephrosis (a)	77	57	32	63	154	447	342	148	1,320
Infections of kidney	21	104	150	73	57	49	51	63	568
Calculus of urinary system ..	—	19	59	84	68	84	79	35	428
Hyperplasia of prostate	—	—	—	—	—	—	—	—	—
Diseases of breast	7	110	560	815	797	415	171	120	2,995
Other diseases of genital organs	40	1,238	6,251	6,336	4,207	2,311	926	538	21,847
<i>Pregnancy, childbirth, and puerperium</i>	—	5,778	33,252	10,680	558	4	—	—	50,272
Complications of above	—	3,138	15,867	5,247	367	4	—	—	24,623
<i>Skin and subcutaneous tissue ..</i>	649	615	583	466	442	519	500	679	4,453
<i>Musculoskeletal system and connective tissue</i>	357	983	1,248	1,464	1,582	1,867	1,682	1,825	11,008
<i>Congenital anomalies</i>	1,005	273	186	120	79	70	62	52	1,847
<i>Certain perinatal conditions ..</i>	712	—	2	—	—	—	—	—	714
<i>Symptoms, signs, and ill-defined</i>	2,902	2,406	2,867	2,105	1,600	1,706	1,687	2,304	17,577
<i>Injury and poisoning</i>	3,690	3,159	2,596	1,777	1,268	1,253	1,315	2,645	17,703
<i>Supplementary classifications (b)</i>	1,333	1,675	5,353	6,067	4,369	4,661	3,040	1,878	28,376
All classes	26,791	25,017	63,883	40,631	25,394	25,668	23,717	28,981	260,082

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

FEMALE PATIENTS TREATED IN HOSPITALS BY AGE GROUPS, QUEENSLAND, 1981

Principal condition treated (International Classification, 1975 revision)	Age group (years)								Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 and over	
<i>Infectious and parasitic</i>	2,066	594	595	296	199	225	238	310	4,523
Intestinal infections	1,333	154	168	80	51	78	82	112	2,058
Tuberculosis	1	—	4	12	3	6	12	14	52
<i>Neoplasms</i>	441	419	827	1,228	1,669	2,127	2,444	2,499	11,654
Lymphatic, haematopoietic tissue	157	76	33	42	64	97	172	186	827
Other malignant neoplasms ..	114	83	269	538	967	1,516	1,909	2,064	7,460
<i>Endocrine, nutrition, and metabolic</i>	236	277	357	423	402	510	567	694	3,466
Diabetes mellitus	64	148	128	116	147	282	325	422	1,632
<i>Blood and blood-forming organs</i>	172	162	96	71	98	141	143	346	1,229
<i>Mental disorders</i>	90	720	2,073	2,131	1,646	1,566	1,203	1,331	10,760
<i>Nervous system and sense organs</i>	2,690	980	1,063	1,309	1,053	1,393	1,440	2,189	12,117
<i>Circulatory system</i>	77	147	560	1,288	1,532	2,806	3,978	7,129	17,517
Chronic rheumatic heart disease	2	7	15	17	20	57	27	13	158
Hypertensive disease	3	13	47	93	205	282	311	327	1,281
Ischaemic heart disease	1	—	9	62	274	753	1,258	1,825	4,182
Other heart disease	33	33	113	153	205	480	800	2,180	3,997
Cerebrovascular disease ..	2	19	22	49	113	378	745	1,791	3,119
<i>Respiratory system</i>	6,349	2,400	1,755	1,259	1,016	1,214	1,425	1,943	17,361
Acute respiratory infections ..	1,750	294	202	121	71	92	97	141	2,768
Influenza	34	31	38	19	11	18	15	27	193
Pneumonia	588	119	85	111	95	127	192	462	1,779
Bronchitis, emphysema, and asthma	2,036	774	637	451	435	465	523	519	5,840
Chronic diseases of tonsils and adenoids	1,366	772	283	80	14	10	2	2	2,529
<i>Digestive system</i>	2,229	2,490	3,286	2,505	2,181	2,500	2,524	3,046	20,761
Peptic ulcer	6	16	58	111	159	193	227	261	1,031
Appendicitis	280	1,195	652	292	151	97	56	41	2,764
Intestinal obstruction and hernia	404	74	189	290	329	407	451	578	2,722
Cirrhosis of liver	1	9	24	26	44	75	47	16	242
Disorders of gallbladder ..	2	122	644	633	530	584	570	480	3,565
<i>Genito-urinary system</i>	627	2,104	8,092	8,166	5,737	3,651	2,203	1,585	32,165
Nephritis, nephrotic syndrome, and nephrosis (a)	148	101	35	57	130	267	310	164	1,212
Infections of kidney	28	102	149	79	64	52	51	54	579
Calculus of urinary system ..	3	8	67	82	97	93	69	31	450
Hyperplasia of prostate	—	—	—	—	—	—	—	—	—
Diseases of breast	13	153	522	841	760	376	199	123	2,987
Other diseases of genital organs	45	1,419	6,826	6,697	4,323	2,426	1,087	626	23,449
<i>Pregnancy, childbirth, and puerperium</i>	—	6,034	35,617	12,078	611	3	—	—	54,343
Complications of above	—	3,257	17,157	6,032	400	3	—	—	26,849
<i>Skin and subcutaneous tissue ..</i>	550	646	612	503	431	469	501	733	4,445
<i>Musculoskeletal system and connective tissue</i>	382	943	1,362	1,714	1,668	2,033	1,915	2,092	12,109
<i>Congenital anomalies</i>	943	284	178	119	71	70	56	36	1,757
<i>Certain perinatal conditions ..</i>	803	2	1	—	—	—	—	—	806
<i>Symptoms, signs, and ill-defined</i>	2,925	2,475	2,957	2,117	1,701	1,818	1,862	2,414	18,269
<i>Injury and poisoning</i>	3,587	3,228	2,697	1,980	1,272	1,275	1,404	2,978	18,421
<i>Supplementary classifications (b)</i>	1,400	1,938	5,846	6,414	5,058	5,052	3,887	2,485	32,080
All classes	25,567	25,843	67,974	43,601	26,345	26,853	25,790	31,810	273,783

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

AVERAGE PERIOD OF TREATMENT IN HOSPITALS, QUEENSLAND, 1980

Principal condition treated (International Classification, 1975 revision)	Males			Females		
	Cases	Total patient- days	Average period (days)	Cases	Total patient- days	Average period (days)
<i>Infectious and parasitic</i>	4,688	28,877	6.16	4,355	23,330	5.36
Intestinal infections	2,187	8,709	3.98	1,992	7,916	3.97
Tuberculosis	168	6,400	38.10	74	2,602	35.16
<i>Neoplasms</i>	12,221	123,587	10.11	10,932	111,402	10.19
Lymphatic, haematopoietic tissue ..	1,180	9,413	7.98	742	6,731	9.07
Other malignant neoplasms	9,267	106,644	11.51	7,147	88,891	12.44
<i>Endocrine, nutrition, and metabolic ..</i>	2,561	25,694	10.03	3,285	31,544	9.60
Diabetes mellitus	1,295	14,058	10.86	1,514	16,609	10.97
<i>Blood and blood-forming organs ..</i>	1,359	7,693	5.66	1,328	13,566	10.22
<i>Mental disorders</i>	9,380	123,019	13.12	10,853	172,351	15.88
<i>Nervous system and sense organs ..</i>	12,730	83,377	6.55	11,734	91,131	7.77
<i>Circulatory system</i>	20,701	251,883	12.17	16,655	285,957	17.17
Chronic rheumatic heart disease ..	142	1,643	11.57	189	2,110	11.16
Hypertensive disease	1,004	6,971	6.94	1,329	13,036	9.81
Ischaemic heart disease	6,910	62,320	9.02	3,866	43,911	11.36
Other forms of heart disease	4,650	54,915	11.81	3,838	57,917	15.09
Cerebrovascular disease	3,287	70,275	21.38	2,744	111,102	40.49
<i>Respiratory system</i>	24,982	133,838	5.36	18,850	91,137	4.83
Acute respiratory infections	4,182	12,449	2.98	3,142	10,075	3.21
Influenza	200	911	4.56	316	1,586	5.02
Pneumonia	2,733	28,078	10.27	1,857	17,199	9.26
Bronchitis, emphysema, and asthma	7,609	32,945	4.33	5,883	27,676	4.70
Chronic diseases of tonsils and adenoids	3,530	7,405	2.10	3,626	8,234	2.27
<i>Digestive system</i>	22,870	132,724	5.80	19,605	121,706	6.21
Peptic ulcer	1,752	13,518	7.72	921	6,989	7.59
Appendicitis	2,936	13,741	4.68	2,860	14,112	4.93
Intestinal obstruction and hernia ..	6,011	33,320	5.54	2,593	17,562	6.77
Cirrhosis of liver	463	5,839	12.61	283	3,220	11.38
Disorders of gallbladder	1,358	12,353	9.10	3,116	25,232	8.10
<i>Genito-urinary system</i>	10,480	63,712	6.08	30,535	140,430	4.60
Nephritis, nephrotic syndrome, and nephrosis (a)	1,087	8,421	7.75	1,320	8,921	6.76
Infections of kidney	163	1,104	6.77	568	3,501	6.16
Calculus of urinary system	781	5,089	6.52	428	3,101	7.25
Hyperplasia of prostate	2,449	21,941	8.96	—	—	—
Diseases of breast	148	466	3.15	2,995	9,179	3.06
Other diseases of genital organs ..	2,668	8,790	3.29	21,847	96,532	4.42
<i>Pregnancy, childbirth, and puerperium ..</i>	—	—	—	50,272	301,415	6.00
Complications of above	—	—	—	24,623	146,333	5.94
<i>Skin and subcutaneous tissue</i>	5,639	41,218	7.31	4,453	33,239	7.46
<i>Musculoskeletal system and connective tissue</i>	12,42	93,890	7.56	11,008	117,270	10.65
<i>Congenital anomalies</i>	2,481	13,792	5.56	1,847	10,957	5.93
<i>Certain perinatal conditions</i>	886	9,884	11.16	714	8,625	12.08
<i>Symptoms, signs, and ill-defined ..</i>	17,703	96,397	5.45	17,577	117,288	6.67
<i>Injury and poisoning</i>	31,817	194,332	6.11	17,703	143,198	8.09
<i>Supplementary classifications (b) ..</i>	21,430	78,687	3.67	28,376	86,275	3.04
All classes	214,350	1,502,604	7.01	260,082	1,900,821	7.31

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

AVERAGE PERIOD OF TREATMENT IN HOSPITALS, QUEENSLAND, 1981

Principal condition treated (International Classification, 1975 revision)	Males			Females		
	Cases	Total patient- days	Average period (days)	Cases	Total patient- days	Average period (days)
<i>Infectious and parasitic</i>	4,827	26,776	5.55	4,523	21,750	4.81
Intestinal infections	2,188	8,289	3.79	2,058	7,787	3.78
Tuberculosis	133	4,570	34.36	52	1,235	23.75
<i>Neoplasms</i>	13,230	129,653	9.80	11,654	120,516	10.34
Lymphatic, haematopoietic tissue ..	1,236	8,211	6.64	827	6,712	8.12
Other malignant neoplasms ..	9,875	113,317	11.48	7,460	97,665	13.09
<i>Endocrine, nutrition, and metabolic</i> ..	2,569	27,184	10.58	3,466	41,498	11.97
Diabetes mellitus	1,309	16,520	12.62	1,632	24,476	15.00
<i>Blood and blood-forming organs</i> ..	1,471	7,679	5.22	1,229	11,740	9.55
<i>Mental disorders</i>	9,405	121,763	12.95	10,760	207,447	19.28
<i>Nervous system and sense organs</i> ..	13,194	86,449	6.55	12,117	100,757	8.32
<i>Circulatory system</i>	22,258	264,641	11.89	17,517	280,606	16.02
Chronic rheumatic heart disease ..	97	1,078	11.11	158	1,778	11.25
Hypertensive disease	953	6,824	7.16	1,281	9,078	7.09
Ischaemic heart disease	7,775	65,509	8.43	4,182	52,234	12.49
Other forms of heart disease ..	5,149	59,519	11.56	3,997	60,649	15.17
Cerebrovascular disease	3,241	75,445	23.28	3,119	99,128	31.78
<i>Respiratory system</i>	23,341	139,456	5.97	17,361	99,897	5.75
Acute respiratory infections	3,807	11,400	2.99	2,768	8,584	3.10
Influenza	125	407	3.26	193	793	4.11
Pneumonia	2,657	29,237	11.00	1,779	21,597	12.14
Bronchitis, emphysema, and asthma	7,106	34,486	4.85	5,840	29,789	5.10
Chronic diseases of tonsils and adenoids	2,521	5,217	2.07	2,529	5,681	2.25
<i>Digestive system</i>	23,728	127,240	5.36	20,761	127,489	6.14
Peptic ulcer	1,915	12,195	6.37	1,031	6,953	6.74
Appendicitis	2,848	13,035	4.58	2,764	13,383	4.84
Intestinal obstruction and hernia ..	6,244	31,419	5.03	2,722	21,303	7.83
Cirrhosis of liver	475	4,991	10.51	242	2,548	10.53
Disorders of gallbladder	1,489	13,007	8.74	3,565	28,082	7.88
<i>Genito-urinary system</i>	10,822	68,709	6.35	32,165	143,333	4.46
Nephritis, nephrotic syndrome, and nephrosis (a)	1,014	10,124	9.98	1,212	9,967	8.22
Infections of kidney	144	1,077	7.48	579	4,223	7.29
Calculus of urinary system	907	6,007	6.62	450	3,092	6.87
Hyperplasia of prostate	2,321	23,575	10.16	—	—	—
Diseases of breast	181	588	3.25	2,987	9,011	3.02
Other diseases of genital organs ..	2,906	9,726	3.35	23,449	98,404	4.20
<i>Pregnancy, childbirth, and puerperium</i> ..	—	—	—	54,343	320,702	5.90
Complications of above	—	—	—	26,849	157,415	5.86
<i>Skin and subcutaneous tissue</i>	5,682	38,135	6.71	4,445	35,916	8.08
<i>Musculoskeletal system and connective tissue</i>	13,308	95,806	7.20	12,109	121,615	10.04
<i>Congenital anomalies</i>	2,585	14,688	5.68	1,757	12,949	7.37
<i>Certain perinatal conditions</i>	1,048	11,751	11.21	806	10,437	12.95
<i>Symptoms, signs, and ill-defined</i> ..	18,708	108,574	5.80	18,269	113,918	6.24
<i>Injury and poisoning</i>	32,522	197,560	6.07	18,421	152,953	8.30
<i>Supplementary classifications (b)</i> ..	25,105	81,842	3.26	32,080	100,704	3.14
All classes	223,803	1,547,906	6.92	273,783	2,024,227	7.39

(a) See note (c) to the table on page 181.

(b) See note (d) to the table on page 181.

The number of days in hospital, as shown in the preceding tables, are the sum of the total periods in hospital of all patients who left hospital during the year, even though part of the period of hospitalisation may have been in the preceding year or years.

In 1981, the average period in hospital for all patients was 7.18 days, females having a slightly higher average than males. The period of treatment varied appreciably with diseases and ranged from 27.45 days for cerebrovascular disease to 2.16 days for chronic diseases of tonsils and adenoids. Generally the average period of treatment increased with age, children under 10 years of age averaging 3.6 days and persons aged 70 and over 17.8 days in hospital.

5 PATIENTS TREATED IN PSYCHIATRIC INSTITUTIONS

For the majority of individuals, in-patient and out-patient psychiatric treatment is provided at specialist psychiatric units attached to general hospitals. In all cases initial referral is to these hospitals. Statistical information regarding these services is incorporated in the information in the preceding section of this chapter.

Psychiatric Hospitals

There are three major long-stay psychiatric hospitals in Queensland administered by the Psychiatric Services Division of the Department of Health: Wolston Park in Brisbane (642 beds); Baillie Henderson in Toowoomba (518 beds); and Mosman Hall in Charters Towers (194 beds).

The next table shows the number of persons, classified according to diagnosis, admitted to the three psychiatric hospitals.

PERSONS ADMITTED TO PSYCHIATRIC HOSPITALS (a), QUEENSLAND, 1982-83
(Source: Queensland Department of Health)

Mental disorders	Males	Females	Persons
Senile and presenile organic psychotic conditions	22	19	41
Alcoholic psychoses	23	—	23
Drug psychoses	—	2	2
Other organic psychotic conditions	12	2	14
Schizophrenic psychoses	101	67	168
Affective psychoses	23	25	48
Paranoid states	12	2	14
Other psychoses	17	21	38
Neurotic depression and other depressive disorders	13	26	39
Other neurotic disorders	1	3	4
Alcohol dependence or abuse	116	14	130
Drug dependence or abuse	1	1	2
Other personality disorders	28	20	48
Stress and adjustment reactions	3	2	5
Non-psychotic disorders of childhood or adolescence	—	—	—
Non-psychotic disorders following brain damage	10	1	11
Conditions associated with physical disorders	—	—	—
Mental retardation	25	23	48
No psychiatric diagnosis	—	—	—
Social reasons	23	3	26
Other and unknown	44	12	56
Total	474	243	717

(a) Wolston Park, Baillie Henderson, and Mosman Hall only.

Services for the Intellectually Handicapped

There are two centres operated by the Intellectual Handicap Services Branch of the Department of Health (Basil Stafford Training Centre in Brisbane and Challinor Centre in Ipswich) and three community villas (in Toowoomba, Maryborough, and Rockhampton) for the care and training of intellectually handicapped children and adults. The next table shows the number of persons admitted to the training centres and villas.

RESIDENTS ADMITTED TO TRAINING CENTRES AND VILLA UNITS, QUEENSLAND
(Source: Queensland Department of Health)

Classification	Training centres (a)		Villa units		Total		
	Long-term	Relief	Long-term	Relief	Long-term	Relief	Total
1981-82							
Mental retardation							
Mild (b)	—	6	2	6	2	12	14
Moderate	6	46	7	62	13	108	121
Severe	14	197	11	69	25	266	291
Profound	1	8	1	25	2	33	35
Unspecified	1	—	—	5	1	5	6
Other	—	—	—	23	—	23	23
Total	22	257	21	190	43	447	490
1982-83							
Mental retardation							
Mild (b)	—	3	2	40	2	43	45
Moderate	9	50	1	43	10	93	103
Severe	25	198	17	102	42	300	342
Profound	—	13	1	22	1	35	36
Unspecified	—	1	1	25	1	26	27
Other	—	—	—	—	—	—	—
Total	34	265	22	232	56	497	553

(a) Basil Stafford Training Centre and Challinor Centre only.

(b) Admission is generally limited to persons with some form of additional disorder, usually behavioural, but the classification mental retardation is used in preference to co-existent disorder.

Nursing care for the treatment of profoundly, multiply, handicapped persons is provided at the Halwyn Centre (at Red Hill in Brisbane), Rockhampton Handicapped Persons Unit, and Maryborough Disabled Children's Unit.

For statistics of these institutions, see Section 3 of this chapter.

6 CAUSES OF DEATH

From 1950, comparisons of causes of deaths with those for earlier periods cannot be made with exactness. As well as regrouping and renaming many diseases in accordance with the latest medical knowledge and practice, the sixth (1948) revision of the International List of Causes of

DEATH RATES (a) FROM SELECTED CAUSES, QUEENSLAND

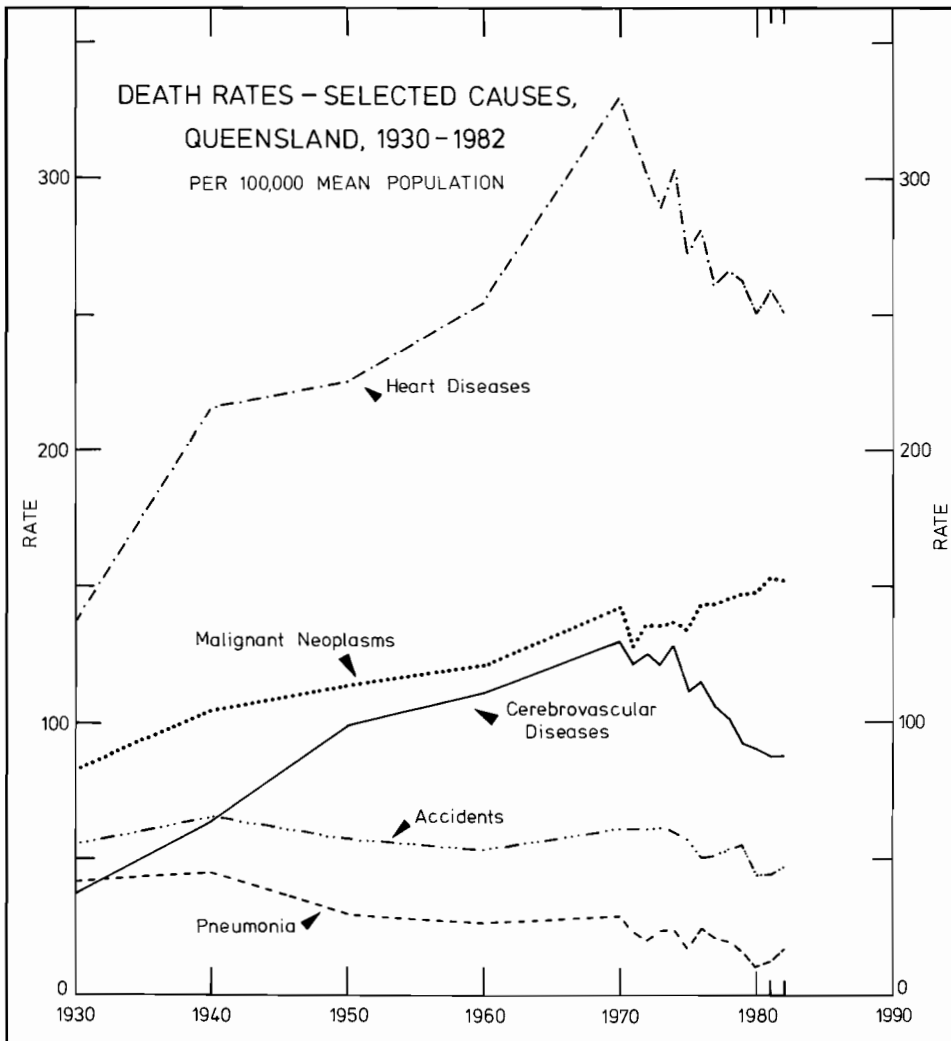
Cause of death	1910	1920	1930	1940	1950	1960	1970	1980	1982
Accidents	0.77	0.60	0.55	0.65	0.57	0.53	0.61	0.44	0.47
Congenital anomalies	0.14	0.15	0.11	0.11	0.11	0.14	0.10	0.06	0.08
Diabetes mellitus	0.06	0.09	0.08	0.15	0.10	0.10	0.11	0.09	0.10
Diseases of early infancy	0.60	0.75	0.48	0.42	0.39	0.30	0.20	0.08	0.08
Heart diseases	1.14	1.39	1.36	2.15	2.25	2.54	3.30	r 2.52	2.51
Hypertensive disease	n.a.	n.a.	n.a.	n.a.	0.46	0.31	0.14	0.06	0.07
Malignant neoplasms (b)	0.67	0.79	0.82	1.03	1.13	1.21	1.42	1.48	1.52
Nephritis, nephrotic syndrome, and nephrosis	0.42	0.53	0.56	0.59	0.29	0.15	0.10	0.09	0.09
Pneumonia	0.34	0.49	0.42	0.45	0.30	0.27	0.29	0.10	0.17
Tuberculosis	0.59	0.51	0.42	0.27	0.20	0.05	0.02	0.01	—
Cerebrovascular disease	0.45	0.45	0.37	0.63	0.99	1.11	1.30	r 0.92	0.88
Other causes	4.52	4.90	3.02	2.52	1.94	1.59	1.88	r 1.42	1.52
All causes	9.70	10.65	8.19	8.97	8.73	8.30	9.47	r 7.28	7.50

(a) Deaths per 1,000 mean resident population.

(b) Including neoplasms of lymphatic and haematopoietic tissue from 1950.

Death introduced a changed principle of coding, by which each death is assigned to its underlying cause as stated by the medical attendant. The seventh (1955), eighth (1965), and ninth (1975) revisions, adopted for Australian use in 1958, 1968, and 1979, respectively, also made alterations to the classification of certain diseases. However, the figures in the table are adequate to show the trends in death rates since 1910.

Modern chemo-therapy has resulted in the marked reduction in morbidity from conditions such as tuberculosis and pneumonia. However, by assisting in improving the expectation of life, this therapy has indirectly led to an increase in morbidity from diseases of the heart and cerebrovascular system.



The following table shows deaths by cause, age, and sex for the year 1982. The major causes of death in 1982 were: heart disease, 33 per cent; malignant neoplasms, 20 per cent; cerebrovascular disease, 12 per cent; diseases of the respiratory system, 9 per cent; and accidents, 6 per cent.

CAUSES OF DEATH BY AGE GROUPS, QUEENSLAND, 1982

Cause of death (International Classification, 1975 revision)	Males					Females					Persons
	Age group (years)					Age group (years)					
	0-14	15-24	25-34	35-64	65 and over	0-14	15-24	25-34	35-64	65 and over	
Infectious and parasitic diseases	6	2	1	9	33	5	—	1	10	24	91
Malignant neoplasms	21	27	25	723	1,416	9	6	19	526	905	3,677
<i>Stomach</i>	—	—	1	41	114	—	—	1	16	63	236
<i>Colon</i>	—	—	2	66	122	—	—	—	66	118	374
<i>Trachea, bronchus, and lung</i> ..	—	1	—	232	441	—	—	—	52	91	817
<i>Skin</i>	—	1	3	46	34	—	—	2	14	25	125
<i>Breast</i>	—	—	—	3	2	—	—	7	134	132	278
<i>Genital organs</i>	1	1	1	28	207	—	—	3	67	90	398
<i>Urinary organs</i>	1	1	—	40	70	3	—	1	15	41	172
<i>Leukaemia</i>	10	9	4	23	46	4	1	1	16	36	150
Diabetes mellitus	—	2	2	37	68	—	—	—	23	104	236
Anaemias	—	—	1	2	9	2	—	—	2	16	32
Diseases of the nervous system and sense organs	12	6	13	27	67	13	3	5	34	38	218
<i>Parkinson's disease</i>	—	—	—	2	27	—	—	—	2	13	44
Chronic rheumatic heart disease	—	—	—	10	14	—	—	2	13	16	55
Hypertensive disease	—	—	—	17	59	—	—	—	13	76	165
Ischaemic heart disease	—	1	9	893	2,293	—	—	3	272	1,803	5,274
Other forms of heart disease ..	4	8	5	95	267	3	5	2	28	330	747
Cerebrovascular disease ..	—	1	10	144	738	—	—	4	110	1,125	2,132
Disease of arteries, arterioles, and capillaries	—	—	2	26	224	1	1	—	15	218	487
Pneumonia	8	3	3	24	178	4	2	2	16	162	402
Influenza	3	—	1	1	9	—	—	—	3	23	40
Bronchitis, emphysema, and asthma	3	3	3	57	178	2	2	10	35	64	357
Peptic ulcer	—	1	—	22	38	—	—	—	2	43	106
Intestinal obstruction and hernia	—	—	—	1	27	—	—	—	5	34	67
Chronic liver disease and cirrhosis	—	—	6	87	41	—	1	2	30	16	183
Nephritis, nephrotic syndrome, and nephrosis	—	—	—	19	90	—	—	1	35	84	229
Congenital anomalies	79	6	3	11	6	82	7	1	7	—	202
Certain perinatal conditions ..	103	—	—	1	—	86	1	—	—	—	191
All other diseases	61	11	17	203	781	34	7	9	127	521	1,771
Accidents	89	269	167	224	107	42	49	27	55	113	1,142
<i>Motor vehicle traffic accidents</i>	39	195	105	107	39	19	40	20	27	23	614
<i>Falls</i>	2	5	2	16	35	—	1	—	4	77	142
<i>Drowning and submersion</i> ..	20	8	6	19	4	6	2	—	3	1	69
<i>All other accidents</i>	28	61	54	82	29	17	6	7	21	12	317
Suicide and self-inflicted injury	2	53	46	97	32	—	8	16	33	12	299
Other external causes	1	5	7	17	—	—	4	5	7	—	46
All causes	392	398	321	2,747	6,675	283	96	109	1,401	5,727	18,149

7 NON-RESIDENTIAL FACILITIES

Extensive non-residential medical treatment is provided by such establishments as out-patient centres, day centres and hospitals, rehabilitation centres, and mobile services such as home nursing, domiciliary care, and ambulances.



Two views of the Gold Coast City Council Chambers
Above: An exterior view
Below: An exhibition in the central hall

GOVERNMENT—Chapter 4
 Photos Australian Information Service





The Entombed Warriors exhibition at the Queensland Art Gallery

Above: A cavalryman

Below: A kneeling crossbowman

EDUCATION—Chapter 8

Photos: Australian Information Service



Included in the following are services administered by public authorities or registered non-profit organisations which employ a full-time equivalent para-medical staff (nurses, nursing aides, physiotherapists, occupational therapists, and psychologists, but not trade instructors or teachers) at least equal to 1 for every 10 daily patient attendances or visits. This definition distinguishes health services from welfare services, which are not covered by this collection, and thereby excludes such services as sheltered workshops, special schools, meals on wheels, and baby clinics offering advisory services but no actual treatment.

Out-patient Services

These provide for the treatment of casualty cases, X-ray tests, physiotherapy, the treatment of special diseases, and minor operations on patients not formally admitted to hospitals. In 1980-81 most of these services were provided at the out-patient departments of 134 of the recognised hospitals throughout the State, or at 50 general and 16 behavioural and psychiatric clinics not attached as integral parts of hospitals. In 1981-82 these services were provided at 135 recognised hospitals, or at 52 general and 16 behavioural and psychiatric clinics. Clinics providing only diagnostic, advisory, or assessment services without actual treatment are excluded.

Excluded from the services in the following table are treatments provided by other establishments in which out-patient services were only a minor activity. In 1980-81, 24 establishments provided 239,321 treatments and, in 1981-82, 27 establishments provided 214,425 treatments.

OUT-PATIENT SERVICES IN STATISTICAL DIVISIONS, QUEENSLAND

Statistical Division	Services	Total visits	Average daily visits	Attendances per 1,000 population (a)
1980-81				
	No.	'000	No.	No.
Brisbane	40	2,738	7,502	2,520
Moreton	11	431	1,180	1,367
Wide Bay-Burnett	18	407	1,116	2,633
Darling Downs	17	313	857	1,848
South-West	16	142	389	5,007
Fitzroy	23	360	987	2,456
Central-West	10	79	217	5,458
Mackay	6	234	641	2,581
Northern	10	446	1,222	2,832
Far North	39	566	1,552	3,998
North-West	10	169	464	4,171
Total	200	5,886	16,125	2,550
1981-82				
	No.	'000	No.	No.
Brisbane	39	2,793	7,651	2,484
Moreton	11	478	1,310	1,409
Wide Bay-Burnett	18	385	1,054	2,466
Darling Downs	18	311	852	1,824
South-West	17	134	366	4,753
Fitzroy	24	388	1,064	2,589
Central-West	10	78	213	5,414
Mackay	7	222	609	2,381
Northern	10	426	1,168	2,671
Far North	39	551	1,511	3,827
North-West	10	175	479	4,355
Total	203	5,940	16,275	2,491

(a) Estimated resident population at 30 June.

Day Centres

Day centres and day hospitals provide therapy which requires non-residential attendance at specified regular intervals over a period of time. Sheltered workshops providing occupational or industrial training with no continuing remedial treatment are excluded.

Domiciliary Nursing Services

Home-nursing and domiciliary nursing services, controlled by public authorities or specialised *ad hoc* organisations, provide medical treatment to persons in their own homes or residential institutions, by medical, para-medical, and registered nursing staff.

DAY CENTRES AND DOMICILIARY NURSING SERVICES, QUEENSLAND

Particulars	Type of service	
	Day centres (a)	Domiciliary nursing services
1980-81		
Number of establishments		
Government departments	5	4
District hospital boards	5	—
Other non-profit organisations	9	51
Total	19	55
Patients on register at 1 July 1980	1,310	9,378
New patients during year	2,214	21,081
Cases finalised during year	1,864	20,466
Patients on register at 30 June 1981	1,660	9,993
Total visits during year	107,126	1,341,978
Average daily number of services	425	3,677
Visits during week ended 27 June 1981		
Aged persons	562	13,913
Physically handicapped persons	932	5,013
Intellectually handicapped persons	42	1,477
Psychiatric or behavioural cases	210	
Alcohol or drug dependent persons	24	333
Other patients	94	6,143
Total	1,864	26,879
1981-82		
Number of establishments		
Government departments	6	4
District hospital boards	7	—
Other non-profit organisations	13	54
Total	26	58
Patients on register at 1 July 1981	1,656	9,794
New patients during year	2,589	22,384
Cases finalised during year	2,231	21,798
Patients on register at 30 June 1982	2,014	10,380
Total visits during year	113,338	1,385,287
Average daily number of services	450	3,795
Visits during week ended 3 July 1982		
Aged persons	441	13,053
Physically handicapped persons	867	5,186
Intellectually handicapped persons	246	1,614
Psychiatric or behavioural cases		
Alcohol or drug dependent persons	41	332
Other patients	155	5,546
Total	1,750	25,731

(a) Except for two centres, these are all ancillary departments attached to other establishments.

Ambulance Services

Details of ambulance services provided, including the Aerial Ambulance Service operated from Rockhampton, are shown in the next tables.

AMBULANCE SERVICES IN STATISTICAL DIVISIONS, QUEENSLAND, 1980-81

Statistical Division	Centres	Patients treated				Cost (a) per service	Total kilometres travelled
		At accidents	At centres	Transported	Total		
	No.	'000	'000	'000	'000	\$	'000
Brisbane	7	19	13	204	236	37.60	3,459
Moreton	12	10	20	37	67	47.75	1,362
Wide Bay-Burnett	17	6	25	40	71	31.23	1,167
Darling Downs	15	5	24	20	49	38.76	857
South-West	9	1	5	3	10	56.25	316
Fitzroy	12	6	21	33	60	37.78	979
Central-West	5	—	1	4	5	42.82	82
Mackay	3	3	16	19	38	34.00	541
Northern	7	5	27	27	59	26.00	625
Far North	14	5	18	29	53	30.42	587
North-West	6	2	3	3	8	68.92	170
Total	107	63	174	418	655	36.89	10,145

(a) Excluding capital cost.

AMBULANCE SERVICES IN STATISTICAL DIVISIONS, QUEENSLAND, 1981-82

Statistical Division	Centres	Patients treated				Cost (a) per service	Total kilometres travelled
		At accidents	At centres	Transported	Total		
	No.	'000	'000	'000	'000	\$	'000
Brisbane	7	20	13	209	242	42.11	3,853
Moreton	12	10	20	40	70	51.41	1,486
Wide Bay-Burnett	16	7	24	45	76	32.17	1,233
Darling Downs	15	5	23	20	48	45.58	882
South-West	9	2	4	3	9	73.79	295
Fitzroy	12	6	21	34	60	49.86	1,085
Central-West	5	—	2	5	8	32.31	96
Mackay	3	3	17	20	40	41.59	588
Northern	7	5	29	29	62	28.75	683
Far North	14	6	20	31	57	43.60	661
North-West	6	2	2	3	8	74.05	212
Total	106	66	175	439	681	42.43	11,073

(a) Excluding capital cost.

Eight of these services are provided by local Hospital Boards and the remainder by the Queensland Ambulance Transport Brigade (Q.A.T.B.). Each Q.A.T.B. Centre is controlled by a local committee, consisting of members elected triennially by subscribers. Overall co-ordination of these services throughout the State is vested in the State Council of the Q.A.T.B.

Ambulance services receipts for 1980-81 were \$23,684,000, including government endowment of \$9,792,000 and in 1981-82 were \$28,994,000, including government endowment of \$11,499,000. Total expenditure for 1980-81 was \$24,152,000 and for 1981-82 was \$28,880,000. The cost per service for 1980-81 was \$36.89 and for 1981-82 was \$42.43.

Finances of Non-residential Health Services

The next table summarises the operating accounts of out-patient centres and domiciliary nursing services. Where the accounts of ancillary services are inseparable from the major activity of the whole establishment, they are not included here.

FINANCES OF NON-RESIDENTIAL HEALTH SERVICES, QUEENSLAND

Particulars	Type of establishment			
	1980-81		1981-82	
	Out-patient centres	Domiciliary nursing services	Out-patient centres	Domiciliary Nursing services
	\$'000	\$'000	\$'000	\$'000
Operating account receipts				
Subsidies, benefits, or direct payments from				
Commonwealth Government	43,440	3,273	118,814	3,451
State Government	57,507	2,959		3,828
Local Government	—	11		24
Parent body or controlling authority	—	30		12
Patients' fees	386	—	428	—
Public subscription, fund raising, donations	—	986	—	909
Other	3	207	5	281
Total	101,336	7,466	119,247	8,504
Operating account expenditure				
Salaries and wages	65,910	6,551	78,424	7,498
Food and provisions	507	2	601	1
Medical, pharmaceutical, and therapeutic products and appliances	20,353	81	22,207	83
Management, establishment, and domestic	8,986	739	10,709	848
Plant, equipment, maintenance, and repairs	2,473	62	3,181	103
Interest on loans	2,949	5	4,119	2
Depreciation	1	149	2	200
Total operating expenditure	101,179	7,589	119,244	8,735
Cost per visit or service	\$ 17.19	\$ 5.66	\$ 20.07	\$ 6.31

Staff

The next table gives details of the full-time equivalent of staff engaged in each type of non-residential service. Where such services were only a minor activity of another establishment separate staff details were not available, and the entire staff was allocated to the major activity.

STAFF OF NON-RESIDENTIAL SERVICES (a), QUEENSLAND

Staff engaged (b)	Type of establishment		
	Separate out-patient clinics	Domiciliary nursing services	Ambulance services
1980-81			
Medical	43	—	—
Other professional	74	34	—
Qualified and student nurses	45	424	—
Enrolled or pupil nurses, ambulance bearers, etc.	22	—	(c) 1,553
Administrative, clerical, etc.	43	59	197
Total	226	517	1,750
1981-82			
Medical	45	—	—
Other professional	81	37	—
Qualified and student nurses	43	416	—
Enrolled or pupil nurses, ambulance bearers, etc.	22	—	(c) 1,616
Administrative, clerical, etc.	50	45	185
Total	240	497	1,801

(a) Including staff for 37 separate out-patient clinics only. Excluding staff at out-patient centres maintained by recognised hospital boards included with recognised hospitals in previous tables. (b) Including full-time equivalent of part-time staff. (c) Including 605 honorary staff in 1980-81 and 595 in 1981-82.

8 SUPPORTIVE AND ANCILLARY HEALTH SERVICES

In addition to the preventive and ancillary services provided directly by the Commonwealth, State, or Local Governments, there are other non-government organisations with similar objectives.

Red Cross Blood Transfusion Service

The Red Cross Blood Transfusion Service collects over 130,000 blood donations annually from voluntary donors and classifies and distributes the blood to doctors and hospitals as required. It supplies all equipment used for, and carries out all tests associated with, the collection of blood donated throughout the State, as well as allied research. The operating costs of the service are met mainly by the Commonwealth and State Governments of whom the latter is the major contributor. The remaining costs are met by the Australian Red Cross Society. In addition 2,335 voluntary workers, including 501 doctors in private practice, donate their services free of charge.

Queensland Recreation Council

The Queensland Recreation Council is concerned with community recreation programs and activities and assists the work of voluntary youth and amateur sports organisations throughout the State. The next table shows a dissection of the Council's receipts and disbursements during the last three years.

QUEENSLAND RECREATION COUNCIL: RECEIPTS AND DISBURSEMENTS, QUEENSLAND
(Source: Queensland Recreation Council)
(\$'000)

Receipts	1980-81	1981-82	1982-83	Disbursements	1980-81	1981-82	1982-83
Commonwealth Government grants (a)	76	—	—	Salaries	913	1,080	1,147
State Government grants ..	1,463	1,439	1,553	Administration	369	305	382
Local Government grants ..	37	42	46	Grants and subsidies ..	117	85	150
Camps	375	391	434	Camps	378	375	405
Other	125	74	79	Other	245	90	28
Total	2,075	1,946	2,113	Total	2,022	1,936	2,112

(a) Financial support for the 'Life. Be in it' campaign ceased in May 1981.

In 1982-83 expenditure amounting to \$825,651 (\$343,253 in 1981-82) was met by the State Department of Works in connection with construction and capital improvements to national fitness camps.

9 CREMATIONS

In 1982 there were two crematoria in Brisbane (Albany Creek and Mount Thompson) and seven outside Brisbane (Gold Coast, Rockhampton, Toowoomba, Townsville, Buderim, Bundaberg, and Maryborough). All nine crematoria are operated by private companies and these carried out 8,547 cremations during 1982.

The next table shows the numbers of cremations and deaths and the proportion of cremations to deaths in Queensland and Australia for each of the latest six years. Cremations may include a number of still-births which are not registered as deaths. Also the Queensland cremations figures include some cases where the death occurred and was registered outside the State.

CREMATIONS AND DEATHS, QUEENSLAND AND AUSTRALIA

Year	Queensland			Australia		
	Cremations	Deaths	Proportion of cremations to deaths	Cremations	Deaths	Proportion of cremations to deaths
	No.	No.	%	No.	No.	%
1977 ..	7,092	16,408	43.2	49,265	108,790	45.3
1978 ..	7,470	16,619	45.0	50,103	108,425	46.2
1979 ..	(a) 7,372	16,388	45.0	(a) 49,284	106,568	r 46.2
1980 ..	7,821	16,497	47.4	50,743	108,695	r 46.7
1981 ..	8,047	17,175	r 46.9	51,462	109,003	47.2
1982 ..	8,547	18,149	47.1	53,811	114,771	46.9

(a) From 1979 Source: Cremations Society of Australia.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Causes of Death (3302.3) (*annual*)

Health and Welfare Establishments (4302.3) (*annual*)

Hospital Morbidity (4303.3) (*annual*)

Hospital Morbidity Rates (4304.3) (*irregular*)

Central Office Publications

Causes of Death (3303.0) (*annual*)

Other Publications

Annual reports of the Air Pollution Council of Queensland, the Water Quality Control Council of Queensland, and reports of the Divisions and Sub-departments of the State Department of Health.

Chapter 11

SOCIAL WELFARE

1 GENERAL

The provision of direct physical care to the aged, sick, and handicapped is described in the preceding chapter on health and related services. These people, however, as well as the indigent and distressed, the unemployed, the socially handicapped, those with young families, and those seeking to establish homes for themselves, require some form of assistance either permanently or temporarily. Most frequently the help required is financial, but it may also be in the form of shelter, social activity, or advisory services. These are provided by the Commonwealth and State Governments and by private organisations and institutions.

Under the Constitution, the Commonwealth Government may legislate on a wide range of pensions, allowances, and benefits, and, since age pensions were first introduced in 1909, the range of financial assistance has been extended to cover many types of social benefits as well as subsidies to services administered by State Government and private organisations.

The State Government provides shelter and social care to the aged in Eventide Homes and the Moreton Bay Nursing Care Unit (and similar annexes to public hospitals) and to children through the Children's Services Department. It also provides shelter and welfare services for Aborigines through the Aboriginal and Islanders Advancement Department. In addition, it provides relief assistance and rail passes to pensioners and others, and subsidises private social welfare organisations. State Government expenditure on social amelioration is given in Chapter 22, Public Finance, Section 4. The details in this chapter show the total cost of homes providing domiciliary care or accommodation for the aged, the handicapped, or for children. Additional costs have been included in the details for health establishments covered in the previous chapter for residents requiring direct physical or personal care.

Many of the social services in the community are provided by church, charitable, or other non-profit organisations, financed by direct collections or other private means, and often subsidised from government funds. Institutions provide shelter for the aged, handicapped, and destitute, and for neglected or wayward children. Some information on these is shown in Section 4 of this chapter. There are also services providing meals, clothing, domestic services, social activity, rehabilitation, entertainment, advisory services to migrants and to those with marital problems, and legal aid. However, no comprehensive statistical information is available on these.

The Commonwealth Government's expenditure on welfare services is financed through the National Welfare Fund, general or special departmental appropriations and trust funds, and by specific purpose grants to the States. Expenditure by the Commonwealth Government on social welfare and disability and service pensions is shown in the ABS bulletin, *Commonwealth Government Finance* (Catalogue No. 5502.0). Expenditure on health benefits is included in Section 7 of this chapter.

In the following sections the benefits or assistance available to different categories of the needy are described briefly. More detailed explanations, including current rates and conditions of eligibility can be obtained by contacting the relevant administrative departments.

2 PENSIONS

Age and Invalid Pensions

Age pensions are payable to residentially qualified men and women who have reached the ages of 65 and 60, respectively. They are subject to an income test unless the person is permanently blind or has reached the age of 70. For persons over 70 years of age, increases above the base rate are subject to an income test. Invalid pensions are payable to persons 16 years of age and over who are permanently incapacitated for work to the extent of at least 85 per cent, or permanently blind. In the former case, they are subject to an income test.

A pension is payable also to a pensioner's wife who does not qualify for an age, invalid, or service pension in her own right. Additional pension is paid to pensioners with dependent children, and supplementary assistance is payable to pensioners in non-government accommodation who pay rent or lodging charges. Lone pensioners with children in their care may also receive a mother's/guardian's allowance.

Widows' Pensions and Supporting Parents' Benefits

These pensions and benefits are payable to widows, deserted wives, and divorcees and also to lone parents (e.g. unmarried parents, widowed fathers, etc.) who do not qualify for other social service pensions. Such persons may also be eligible for supplementary assistance, additional pension or benefit for dependent children, and mother's/guardian's allowance at the same rates as for age and invalid pensioners.

AGE, INVALID, AND WIDOWS' PENSIONS AND SUPPORTING PARENTS' BENEFITS

Item	Queensland						Australia
	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1982-83
AGE PENSIONS (a)							
Age pensioners No.	193,268	198,017	202,487	207,089	210,317	213,844	1,390,838
Males No.	66,807	68,704	70,453	71,920	72,388	72,881	460,667
Females No.	126,461	129,313	132,034	135,169	137,929	140,963	930,171
Wife pensioners No.	4,656	4,878	4,932	4,795	4,533	4,390	26,380
Aged and wife pensioners per							
1,000 population (b) No.	r 91	92	92	r 90	r 89	88	92
Amount paid (c) \$'000	447,165	494,316	539,194	606,953	704,469	756,286	4,867,554
INVALID PENSIONS (a)							
Invalid pensioners No.	32,453	34,706	36,818	35,555	33,492	32,390	220,289
Males No.	21,400	23,348	25,205	24,417	23,150	22,557	155,672
Females No.	11,053	11,358	11,613	11,138	10,342	9,833	64,617
Wife pensioners No.	7,214	8,192	9,019	8,522	7,801	7,455	57,011
Invalid and wife pensioners per							
1,000 population (b) No.	18	r 19	20	19	17	16	18
Amount paid (c) \$'000	94,089	108,409	124,817	141,262	153,910	158,490	1,068,350
WIDOWS' PENSIONS (a)							
Pensioners No.	19,828	21,004	21,353	21,437	21,314	21,424	164,606
Pensioners per 1,000							
population (b) No.	9	r 9	9	9	9	9	11
Amount paid (c) \$'000	56,962	64,540	71,609	81,051	91,105	96,278	758,086
SUPPORTING PARENTS' BENEFITS (a)							
Beneficiaries No.	10,642	10,961	12,324	19,147	22,358	25,560	140,228
Beneficiaries per 1,000							
population (b) No.	5	5	5	8	9	10	9
Amount paid (c) \$'000	34,386	40,031	45,190	73,256	108,577	131,276	727,734

(a) Pensioners and beneficiaries at 30 June. (b) Estimated resident population. (c) Including wives' pensions, mother's/guardian's allowance, additional pension for children, supplementary assistance, and from November 1980, family assistance.

Disability Pensions and Service Pensions

Disability (war) pensions are paid to disabled veterans and their dependants and service pensions are available to qualified male and female veterans.

DISABILITY AND SERVICE PENSIONS

Item	Queensland						Australia
	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1982-83
DISABILITY PENSIONS (a)							
Total recipients No.	76,582	74,729	72,940	71,888	71,252	71,655	410,473
Incapacitated veterans .. . No.	31,117	30,692	30,243	29,915	29,703	29,670	168,355
Dependants No.	45,465	44,037	42,697	41,973	41,549	41,985	242,118
Recipients per 1,000 population (b) No.	r 35	34	32	31	r 29	29	27
Expenditure (c) \$'000	68,629	68,275	71,101	81,439	85,019	105,016	646,470
SERVICE PENSIONS (a)							
Total recipients (d) No.	35,046	40,012	45,575	51,451	56,503	62,881	341,148
Veterans No.	21,837	24,516	27,474	30,538	33,268	36,786	200,492
Dependants No.	13,209	15,496	18,101	20,913	23,235	26,095	140,656
Recipients per 1,000 population (b) No.	16	18	20	22	r 23	25	22
Expenditure \$'000	68,367	81,852	99,468	130,547	153,963	196,924	1,057,951

(a) Recipients at 30 June.
seamen's and other pensions.

(b) Estimated resident population at 30 June.
(d) Including pensions granted as an act of grace.

(c) Including widows' pensions and allowances and
(d) Including pensions granted as an act of grace.

3 UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS

Benefits are payable by the Commonwealth Government to persons whose normal earnings are interrupted through unemployment, sickness, or special circumstances. Benefits are subject to age, residential, and other eligibility conditions.

UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS

Particulars	Queensland						Australia
	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1982-83
Unemployment benefits							
Number of benefits granted .. .	155,940	140,537	147,160	148,359	145,427	210,599	1,115,323
Amount paid \$'000	123,476	143,365	139,545	146,933	165,163	340,748	2,248,980
Persons on benefit at 30 June							
Number	43,796	48,256	46,746	44,680	53,371	101,041	635,002
Per 1,000 population (a) .. .	20	22	21	19	22	41	41
Sickness benefits							
Number of benefits granted .. .	25,296	23,425	27,081	27,449	32,296	27,990	156,632
Amount paid \$'000	16,710	16,769	18,226	23,965	32,976	42,232	270,776
Persons on benefit at 30 June							
Number	4,640	4,716	5,018	6,305	8,213	10,071	64,203
Per 1,000 population (a) .. .	2	2	2	3	3	4	4
Special benefits (b)							
Number of benefits granted .. .	6,559	6,257	11,204	15,176	9,106	9,672	70,074
Amount paid \$'000	3,489	4,067	5,699	7,594	9,491	12,372	89,167
Persons on benefit at 30 June							
Number	1,181	1,428	1,825	1,934	2,184	2,970	20,899
Per 1,000 population (a) .. .	1	1	1	1	1	1	1

(a) Estimated resident population at 30 June.

(b) Including, from 1981-82, special benefits to migrants in accommodation centres.

Unemployment benefits provide income support to the unemployed and their dependants. Sickness benefits provide income support to persons (and their dependants) temporarily incapacitated for work who have lost income as a result. Special benefits, which are discretionary payments, provide income support to persons who are ineligible for pensions, supporting

parents' benefits, or unemployment or sickness benefits and who are unable to provide for themselves and their dependants.

A number of employment training and assistance schemes are conducted by State and Commonwealth Governments. For details see Chapter 12, Labour Force, Section 8.

4 RESIDENTIAL WELFARE ESTABLISHMENTS

Under the *Aged or Disabled Persons Homes Act* 1954 assistance to homes for the aged or disabled conducted by religious or other non-profit organisations is provided by a Commonwealth Government subsidy towards the capital cost of the home and land. For homes providing all meals and personal care for the residents, a subsidy is payable on the basis of the number of persons aged 80 years or over and other persons who receive specified personal care services on a permanent basis.

The *States Grants (Dwellings for Pensioners) Act* 1974 was designed to assist the States with the provision of self-contained dwelling units at reasonable rentals for certain classes of pensioners during the four years ended 30 June 1978. The scheme is being continued under the *Housing Assistance Act* 1981 with wider eligibility criteria and under conditions giving States greater flexibility in the way funds can be applied.

The *Homeless Persons Assistance Act* 1974 provides for the Commonwealth Government to make capital grants to voluntary bodies for improving and extending homeless persons assistance centres. It also provides for subsidies for accommodation, meals, and social welfare worker services.

Details of assistance from the above schemes are shown in the next table.

RESIDENTIAL WELFARE ESTABLISHMENTS: GRANTS AND SUBSIDIES RECEIVED
UNDER COMMONWEALTH ACTS, QUEENSLAND

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
AGED OR DISABLED PERSONS HOMES ACT (a)						
Capital grants						
Number	23	16	29	20	23	40
Amount \$'000	3,693	3,097	4,849	3,841	6,753	9,182
Personal care subsidy						
Approved premises (b) No.	109	117	123	128	129	137
Qualified residents (b) No.	3,063	3,035	3,422	3,825	3,834	4,132
Amount \$'000	2,085	2,210	2,429	3,441	3,839	6,096
AGED PERSONS HOSTELS ACT (a)						
Grants						
Number	12	7	3	3	1	1
Amount \$'000	5,934	7,585	2,325	1,355	407	376
Beds provided No.	381	404	140	72	16	16
HOUSING ASSISTANCE ACT (c)						
New dwellings						
Number approved	78	103	214	216	216	284
Value \$'000	1,479	2,056	4,495	5,009	5,229	6,977
HOMELESS PERSONS ASSISTANCE ACT (a)						
Capital grants \$'000	56	321	2,841	2,366	771	230
Subsidies \$'000	210	273	310	487	651	930

(a) Source: Commonwealth Department of Social Security.
Pensioners) Act prior to 1 July 1978. Source: Queensland Housing Commission.

(b) At 30 June.

(c) Pensioners only. States Grants (Dwellings for

Under the *Handicapped Persons Assistance Act 1974*, the Commonwealth Government provides a subsidy to eligible organisations for the residential accommodation and/or training of handicapped adults and children. Further details are shown under Sheltered Workshops in Section 7 of this chapter.

In April 1978, the Department of Children's Services was charged with the administration of grants to the Women's Refuges Program which was a joint Commonwealth and State Government program. Since 1 July 1981 the State Government has assumed full financial responsibility for funding Women's Refuges and makes available subsidies under the Women's Services Program. Twenty-one Women's Refuge projects have been approved for funding.

Residential care for children is a joint venture between the Department of Children's Services and voluntary organisations. Government and licensed institutions are included in the next table and are shown in more detail on page 205.

The next table shows residential welfare establishments classified into two types, domiciliary care homes and accommodation hostels or units.

RESIDENTIAL WELFARE ESTABLISHMENTS, QUEENSLAND

Particulars	Domiciliary care homes			Accommodation hostels, units, etc.	
	For adults		For children	Board and lodging only	Accommodation or lodging only
	Government and semi-government	Other			
1980-81					
Number of establishments	7	68	94	81	203
Admissions during year	613	930	1,828	3,671	191
Residents at 30 June 1981	438	3,271	903	3,260	3,328
Males	282	1,191	557	1,118	1,185
Females	156	2,080	346	2,142	2,143
Receipts					
Residents' fees, rents \$'000	1,062	7,920	409	7,350	1,880
Government contributions \$'000	3,090	2,117	5,132	2,283	24
Other	—	711	545	1,088	164
Total	4,152	10,748	6,086	10,721	2,068
Total expenditure (a) \$'000	4,152	10,245	6,159	10,195	1,996
Cost per resident day \$	25.44	8.93	18.20	8.83	1.65
Staff (full-time equivalent)	321	700	419	633	25
1981-82					
Number of establishments	7	79	96	84	231
Admissions during year	587	821	2,162	3,789	498
Residents at 30 June 1982	404	3,608	927	3,307	3,718
Males	250	1,262	570	1,103	1,354
Females	154	2,346	357	2,204	2,364
Receipts					
Residents' fees, rents \$'000	796	10,222	454	9,790	2,402
Government contributions \$'000	3,971	2,327	6,062	2,641	18
Other	—	1,050	599	1,254	174
Total	4,767	13,599	7,114	13,685	2,594
Total expenditure (a) \$'000	4,767	13,092	7,164	12,225	2,512
Cost per resident day \$	30.48	10.00	21.68	10.31	1.93
Staff (full-time equivalent)	306	754	446	653	30

(a) Excluding capital expenditure.

Domiciliary Care Homes are establishments whose predominant activity is the provision of full board and lodging and some personal, custodial, or parental care for the aged, handicapped, or dependent or neglected children. These establishments receive government benefits.

Establishments Providing Board and Lodging Only are run on a non-profit basis to provide board and lodging or some form of social assistance or rehabilitation to various groups, e.g. aged, unmarried mothers, persons in temporary distress, etc. Some government welfare benefits may be received.

Establishments Providing Accommodation Only are predominantly for the aged or the handicapped, are subsidised, and are run on a non-profit basis. Board is not provided, although in some establishments occasional meals may be served. Separate dwellings, including those subject to rental rebate arrangements, and night shelters are excluded.

5 NON-RESIDENTIAL SERVICES FOR THE AGED AND SICK

Home Nursing Services

The activities of these services are shown in Chapter 10, Health, Section 7. Generally, such services are eligible for a Commonwealth Government subsidy if they are provided by non-profit organisations which employ registered nurses, and receive assistance from a State or Local Government authority. In 1982-83 home nursing services in Queensland received Commonwealth Government assistance amounting to \$3,908,000.

Delivered Meals (Meals on Wheels)

The *Delivered Meals Subsidy Act* 1974 provides for subsidies, payable by the Commonwealth Government, to approved meals-on-wheels services on a per meal basis to help with the maintenance and expansion of these services. In 1982-83, 112 approved services received subsidies totalling \$541,666. The Queensland Government provides a subsidy of up to \$7,500 towards the cost of establishment, relocation, and in some cases replacement, of kitchen equipment and serving facilities.

Community Home Care Services

The Commonwealth Government, under the *States Grants (Home Care) Act* 1973, shares with the State Government, on a dollar for dollar basis, the cost of providing housekeeping and other domestic assistance to persons, mainly aged, who cannot fully maintain their own homes. In 1982-83 the Commonwealth Government provided \$2,962,004.

Community Welfare

Grants and special assistance are provided to major welfare co-ordinating bodies including the Australian Council on the Ageing, the Australian Council for Rehabilitation of the Disabled, and the Australian Council of Social Service. Special assistance is given to locally-based community welfare agencies experiencing serious financial difficulties. Organisations operating community information centres are also assisted financially.

6 CHILDREN'S SERVICES

Adoption of Children

All adoptions must be approved by the Director of Children's Services. Adoption confers hereditary rights on the child. Other features of the *Adoption of Children Act* 1964-1983 are that the applicants must be 21 years of age or older. A male applicant must be at least 18 years older than the child and a female applicant at least 16 years older, except in the case of natural parents. Children over 12 years of age must consent to their adoption. From 1967 the adoption of single persons aged 21 years and over has been permitted under certain conditions.

ADOPTION OF CHILDREN, QUEENSLAND
(Source: Queensland Department of Children's Services)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Applications received	1,013	994	760	773	895	890
Children adopted						
Boys	339	299	230	234	224	288
Girls	321	264	220	220	243	267
Total	660	563	450	454	467	555
Children adopted by						
Non-relatives	361	334	282	301	303	298
Relatives	14	16	3	8	7	68
Spouse of natural parent	285	213	165	145	157	189
Ages of children adopted						
Under 1 year	322	292	224	238	250	234
1 year and under 6 years	152	97	59	55	50	85
6 years and under 13 years	147	130	127	119	129	164
13 years and under 21 years	37	40	37	40	38	70
21 years and over	2	4	3	2	—	2

The numbers of children available for adoption have decreased in recent years because of a number of factors, including changes in social attitudes and increased financial support by the government (supporting parents' benefits). Current waiting time per application is approximately four years which appears to have influenced the number of applications being received.

Children in Care of the State

The Department of Children's Services is charged with infant life protection and the care, control, or protection of dependent and neglected children. To this end, the Department maintains a number of government establishments and is responsible for the licensing and supervision of privately-conducted children's homes. Most of these establishments are classified as *Domiciliary Care Homes* and are included in the table in Section 4 of this chapter. The remainder are classified as *Residential Health Establishments* and details of these are included in Chapter 10, Health, Section 3. The next table shows the numbers of children in the care of the Children's Services Department at 30 June 1983, and also gives particulars of the type of care, protection, or control provided, but excludes 724 children under general supervision and 37 children on remand in custody.

CHILDREN IN CARE, QUEENSLAND, AT 30 JUNE 1983
(Source: Queensland Department of Children's Services)

Placement	Care and protection		Care and control		Total		
	Males	Females	Males	Females	Males	Females	Persons
In institutions							
Government (a)	28	38	92	8	120	46	166
Licensed	278	187	68	5	346	192	538
Foster care	650	673	16	8	666	681	1,347
Employment	10	2	9	—	19	2	21
In adult custody	76	91	74	28	150	119	269
Home placement	426	450	325	65	751	515	1,266
Other establishments (b)	25	14	5	1	30	15	45
Other (c)	25	26	35	22	60	48	108
Total	1,518	1,481	624	137	2,142	1,618	3,760

(a) Including Wilson Youth Hospital. absconders and transfers interstate.

(b) Including hospitals, establishments for the handicapped, and gaols.

(c) Including

In 1982-83 expenditure incurred in maintaining government institutions amounted to \$8,423,871 from the Consolidated Revenue Fund and \$2,139,783 expended by the Department of Works. Licensed institutions received maintenance payments of \$2,433,724 while capital works subsidies amounted to \$239,341 and subsidies for repairs etc. to \$242,259.

Pre-school Training and Child Care

Details of the operations of pre-schools, kindergartens, and child care centres are included in Chapter 8, Education, Section 2. From 1979, free milk has been provided by the State Government to each child regularly attending approved centres. Costs for 1982-83 were \$803,124.

7 HEALTH BENEFITS

Hospital and medical benefits schemes have existed in Australia in various forms since 1952. Prior to 1975 these schemes were based on the principle of voluntary insurance. The Australian Health Insurance Program (Medibank) commenced operation in July 1975. Since its inception it has undergone many changes, full details of which are given in Chapter 10, Social Welfare, Section 8 of the 1981 *Year Book*.

A new system of health insurance arrangements commenced on 1 September 1981. Under the new arrangements, Commonwealth medical benefits are restricted to those people with at least basic medical cover with a registered medical benefits organisation (except for eligible pensioners who have a Pensioner Health Benefits Card and disadvantaged persons who have a Health Care Card). The basic level of medical insurance increased from 75 per cent to 85 per cent of the Schedule fee with a maximum payment of \$10.00 per item of service by the insured. A flat rate of Commonwealth Medical Benefit for medically insured persons of 30 per cent of Schedule fees applies to all Schedule medical services. Pensioners continue to be covered at the 85 per cent level whilst disadvantaged persons are now eligible to receive Commonwealth Medical Benefits at 85 per cent of Schedule fees (with a maximum gap of \$5.00 where the doctor does not bulk bill).

New hospital funding arrangements also commenced on 1 September 1981 when the State Government assumed full financial responsibility for hospitals. The Commonwealth Government is to provide a grant to the State to cover its proportionate share for those patients who could be classified as pensioners or persons in need.

MEDICAL AND HOSPITAL BENEFITS INSURANCE SCHEMES (a)
(Source: Commonwealth Department of Health)

Particulars	Queensland			Australia
	1980-81	1981-82	1982-83	1982-83
Medical Benefits				
Registered organisations	9	9	10	67
Membership: Basic benefits (b)				
Single '000	112	135	133	1,533
Family '000	239	277	273	2,403
Estimated number of persons covered '000	900	1,046	1,037	9,439
Approximate proportion of population covered %	39	44	42	62
Hospital Benefits				
Registered organisations	9	9	10	73
Membership: Basic benefits (b)				
Single '000	140	162	160	1,808
Family '000	248	278	271	2,530
Estimated number of persons covered '000	942	1,059	1,041	10,068
Approximate proportion of population covered %	41	44	42	66

(a) At 31 March. (b) Excluding membership in tables providing supplementary/gap benefits. Also excluding a small number of members with partial basic hospital benefits.

The \$16.00 per day bed subsidy to private hospitals increased to \$28.00 per day for surgical patients from 25 June 1981. The existing subsidy level of \$16.00 has been retained for other private hospital patients.

The administrative arrangements are such that a wide variety of health insurance coverage plans, both medical and hospital, are available from private health insurance organisations. Details of membership are shown in the preceding table.

Pharmaceutical Benefits

This Commonwealth Government scheme provides for benefit on a comprehensive range of drugs and medicines, when supplied by an approved pharmacist upon presentation of a prescription, or by an approved hospital to patients receiving treatment at the hospital. Prescriptions are dispensed to persons holding a Pensioner Health Benefits Card or a Health Benefits Card free of charge and to persons holding a Pharmaceutical Benefits Concession Card or a Health Care Card at a reduced patient contribution charge.

Details of the numbers of benefit prescriptions and amounts paid out in respect of these are shown below.

PHARMACEUTICAL PRESCRIPTION BENEFITS, QUEENSLAND
(Source: Commonwealth Department of Health)

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Benefit prescriptions '000	14,113	14,478	13,592	14,605	16,529	16,220
Commonwealth payments \$'000	37,176	40,820	40,685	46,384	60,291	63,494
Patient contributions \$'000	16,994	19,560	18,311	19,421	24,742	26,612

Nursing Home Benefits

From 3 November 1983, a basic benefit of \$26.65 per day for ordinary care patients and an extensive care benefit of \$6.00 per day for patients receiving extensive nursing care became payable to nursing homes approved under the National Health Act. These benefits are payable by the Commonwealth Government in respect of qualified nursing home patients accommodated in these nursing homes. Where fees are charged by nursing homes, these benefits are deducted from the patients' accounts.

Under the *Nursing Homes Assistance Act* 1974, the Commonwealth Government provides financial assistance to meet the operating deficits of nursing homes operated by non-profit organisations which agree to participate in the deficit financing scheme. Deficit financing is an alternative to the payment of nursing home benefits and qualified patients are charged only a prescribed fee equivalent to the minimum patient contribution.

Domiciliary Nursing Care Benefits

This scheme provides \$42 per fortnight payable to approved persons who care for chronically ill relatives at home. This Commonwealth benefit is primarily intended to offer an alternative to nursing home care.

Handicapped Children's Benefits

A Commonwealth benefit is paid directly to approved Handicapped Persons' Homes for each handicapped child under 16 years who is residing in an approved home.

Handicapped Children's Allowances

These allowances, paid by the Commonwealth Government, help meet the extra costs of bringing up handicapped children and encourage parents to care for them at home rather than admit them to institutions.

Sheltered Employment Allowances

These allowances are paid to disabled people with limited means who are employees in sheltered workshops. These people are qualified to receive an invalid pension or would become eligible for an invalid pension if they ceased work in the workshops. The allowance is payable at the same rate as the invalid pension and an incentive allowance, in lieu of supplementary assistance, is also payable.

Sheltered Workshops and Activity Therapy Centres

Under the *Handicapped Persons Assistance Act 1974*, subsidies are payable to organisations providing sheltered employment opportunities, accommodation, and facilities designed to promote the personal development of handicapped adolescents and adults to enable them to gain maximum independence and self sufficiency. For example, salaries of certain workshop, hostel, and therapy centre staff are subsidised and a training fee is paid to organisations for each disabled person who graduates from sheltered employment to normal employment. At 30 June 1983 there were 234 approved services including training centres, activity therapy centres, sheltered workshops, and residentials in Queensland.

Tuberculosis Allowances

Tuberculosis allowances, payable by the Commonwealth Government, are granted to persons and their dependants suffering from tuberculosis.

NURSING CARE AND HANDICAPPED CHILDREN'S BENEFITS AND ALLOWANCES, QUEENSLAND

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Nursing Home Benefits						
<i>Approved nursing homes (a)</i> No.	156	162	177	183	193	200
Deficit financed No.	49	50	56	59	67	71
Government No.	13	14	21	21	21	21
Other No.	94	98	100	103	105	108
<i>Approved beds (a)</i> No.	8,852	9,464	10,240	10,399	11,044	11,624
Deficit financed No.	2,309	2,497	2,741	2,874	3,311	3,582
Government No.	2,229	2,342	2,638	2,455	2,445	2,445
Other No.	4,314	4,625	4,861	5,070	5,288	5,597
Deficit finance \$'000	11,097	12,044	14,654	19,009	27,580	39,443
Commonwealth benefit						
Benefit days '000	1,754	1,684	1,808	1,874	2,353	2,576
Benefits (b) \$'000	23,877	24,607	28,855	34,856	50,073	61,825
Private insurance (c)						
Benefit days '000	356	654	690	751	421	13
Benefits (b) \$'000	4,231	9,675	10,747	13,156	8,241	200
Domiciliary Nursing Care Benefits						
Benefit days '000	754	796	923	(d) 1,134	(d) 1,328	(d) 1,424
Benefits \$'000	1,509	1,593	1,846	3,200	3,985	4,273
Handicapped Children's Benefits						
<i>Approved homes (a)</i> No.	32	34	37	37	38	40
Children accommodated (a) No.	279	223	236	310	281	224
Benefit days '000	67	66	67	89	77	92
Benefits \$'000	332	329	334	402	386	323
Handicapped Children's Allowances						
Allowances current (a) No.	3,330	3,739	3,873	3,756	3,771	3,846
Allowance \$'000	2,355	2,715	3,007	2,627	3,127	3,168

(a) At 30 June.

(b) Including extensive and additional benefits.

(c) Since 1 September 1981 private insurance is only required to cover the minimum statutory patient contribution towards the cost of accommodation and care.

(d) Estimated.

8 FAMILY BENEFITS AND OTHER ALLOWANCES

Home Deposit Assistance Scheme

This scheme, administered by the Commonwealth Department of Social Security, is designed to assist both married and single persons to acquire their first home. See Chapter 15, Housing and Construction, Section 3.

Family Allowance (Formerly Child Endowment)

Family allowance is payable by the Commonwealth Government to residents of Australia, or to approved institutions, who are responsible for the custody, care, and control of children under the age of 16, or of full-time students aged 16 but under 25 years who are substantially dependent on their parents.

The number of children and students for whom allowances are received and the amounts paid in Queensland are shown in the next table.

FAMILY ALLOWANCES, QUEENSLAND

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Children and students (a) No.	654,593	648,314	653,935	664,982	685,886	704,361
In families No.	652,651	646,642	652,312	663,046	683,642	702,139
In institutions No.	1,942	1,672	1,623	1,936	2,244	2,222
Children and students per 1,000						
population (b) No.	r 301	r 293	r 289	r 284	r 283	285
Amount paid \$'000	158,525	149,824	160,358	149,385	162,704	227,364

(a) At 30 June.

(b) Estimated resident population at 30 June.

Family Income Supplement

The Commonwealth Government provides a tax-free payment for each child or student in a family where total family income is low, but where the parents do not receive a social security pension, benefit, or similar Commonwealth assistance.

Assistance to Families

From November 1980, the payment of Family Assistance was transferred to the Commonwealth Government and subsumed in the Supporting Parents' Benefit. In addition the State Government provides assistance to families whose income or resources are inadequate to maintain or properly care for the children. Assistance is given in the form of a weekly allowance for each child. At 30 June 1983 there were 257 recipients with 402 children. Expenditure on such assistance was \$323,956 in 1982-83.

The administration of the Family Support Services Program became the responsibility of the Department of Children's Services in April 1978 with the acceptance of funds offered by the Commonwealth Government. It was a three-year pilot scheme with a total of \$300,000 per year available for grants to approved organisations. The program was extended from 1 January 1982 to 31 December 1984 with a total allocation for Queensland of \$970,000 and is now known as the Family Support Services Scheme. The scheme aims to assist parents and children to develop family self-sufficiency by providing support for families in the context of their communities. Approval has been given for the funding of 10 projects under the extended scheme.

Double Orphan's Pension

This Commonwealth Government pension is payable to the guardian of a child who has both parents dead or one dead and the other missing. In Queensland at 30 June 1983, guardians were receiving pensions for 549 children and 179 students and religious or charitable institutions were receiving pensions for 9 children and 2 students. Double Orphan's Pension can also be paid

if a child has been granted refugee status and both parents are outside Australia, both parents are missing, or one parent is outside Australia and one parent is missing. Payments in 1982-83 amounted to \$427,000.

Funeral Benefits

A Commonwealth Government funeral benefit is paid to eligible persons to help meet the cost of a funeral of a deceased pensioner or the deceased spouse or child of a pensioner.

Fringe Benefits

The Commonwealth Government provides assistance by way of fringe benefits to certain eligible persons and their dependants in addition to their basic social security entitlements. These benefits include telephone rental reduction, mail re-direction concessions, and reductions in fares on Commonwealth rail and shipping services as well as certain medical concessions. Benefits provided to eligible persons by the State Government and Local Authorities include reduction in fares on the State railways, reduction in rate charges, and reduced fares on Council buses.

Mobility Allowance

The allowance provides assistance for disabled people who are working or training and who are unable to use public transport without substantial assistance. This allowance is provided in recognition of the difficulties and additional costs facing disabled people who undertake employment or vocational training.

Rehabilitation Service

The Commonwealth Government provides an integrated rehabilitation service (vocational, social, medical) to persons in the working age group and to adolescents (14 to 15 years of age) who have some form of disability or handicap and who would benefit substantially from remedial treatment or vocational training, enabling them to engage in either a suitable vocation or return to independent or semi-independent living within the community.

Disabled people receiving, or eligible for, a Social Security pension or benefit or sheltered employment allowance who undertake a rehabilitation program offered by the Commonwealth Rehabilitation Service may be eligible to receive a rehabilitation allowance. The allowance is paid at the same rate as invalid pension and is income tax free.

COMMONWEALTH REHABILITATION SERVICE, QUEENSLAND
(Source: Commonwealth Department of Social Security)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Cases referred (a) No.	5,077	5,039	5,982	4,230	4,554	4,604
Accepted for rehabilitation No.	556	723	1,050	1,100	1,035	1,054
Placed in employment No.	253	257	281	390	298	308
Expenditure (b) \$	1,883,348	2,163,150	3,631,000	4,190,000	4,474,000	6,109,000

(a) Including many who are not eligible for treatment or training and those finding employment before training can be commenced.
(b) Excluding capital expenditure and administrative costs of the Rehabilitation Service.

9 ABORIGINAL POPULATION AND WELFARE

Census Populations

The Australian Constitution as it was framed in 1901 specifically excluded Aborigines from the general enumeration in the Australian Population Census, but they were included in counts, and figures were published separately. However, following a referendum in 1967, Aborigines have been included in all official series of the Australian population. In anticipation of this, efforts were made at the 1966 Census to improve coverage and this action has been intensified at subsequent Censuses.

The wording of the question to identify Aboriginals and Torres Strait Islanders was changed slightly between the 1976 and 1981 Censuses in order to effect a better response. The question is based on self-identification, that is, people were asked to identify themselves as Aboriginals or Torres Strait Islanders. For further details refer to the ABS publications *Census 81—Aboriginals and Torres Strait Islanders* (Catalogue No. 2153.0) and *Census of Population and Housing, Counts of Aboriginals and Torres Strait Islanders, 30 June 1971, 1976, 1981* (Catalogue No. 2164.0).

ABORIGINAL AND ISLANDER POPULATION, AUSTRALIA, CENSUSES 1976 AND 1981

State or Territory	Census 30 June 1976		Census 30 June 1981	
	Number	Proportion of total	Number	Proportion of total
	'000	%	'000	%
New South Wales	40.5	25.2	35.4	22.1
Victoria	14.8	9.2	6.1	3.8
Queensland	41.3	25.7	44.7	28.0
South Australia	10.7	6.7	9.8	6.1
Western Australia	26.1	16.2	31.4	19.6
Tasmania	2.9	1.8	2.7	1.7
Australian Capital Territory	0.8	0.5	0.8	0.5
Northern Territory	23.8	14.8	29.1	18.2
Australia	160.9	100.0	159.9	100.0

The next table shows population data for the Aboriginal and Torres Strait Islander population by Statistical Division and for comparison, the proportion of the total population in each area at the 1981 Census.

ABORIGINAL AND ISLANDER POPULATION, QUEENSLAND, CENSUS 30 JUNE 1981

Statistical Division	Males	Females	Persons	Proportion of total population	Proportion of Aboriginal and Islander population
	'000	'000	'000	%	%
Brisbane	3.2	3.3	6.6	0.6	14.7
<i>Brisbane City</i>	2.1	2.2	4.3	0.6	9.7
<i>Other Brisbane</i>	1.1	1.1	2.2	0.7	5.0
Moreton	0.6	0.5	1.1	0.3	2.6
Wide Bay-Burnett	1.2	1.3	2.5	1.6	5.5
Darling Downs	0.5	0.5	1.1	0.7	2.4
South-West	0.7	0.7	1.5	5.4	3.3
Fitzroy	1.6	1.6	3.2	2.2	7.0
Central-West	0.3	0.3	0.6	4.3	1.4
Mackay	0.7	0.7	1.4	1.5	3.1
Northern	2.8	2.6	5.4	3.5	12.1
Far North	7.7	8.0	15.7	10.7	35.0
North-West	2.8	2.9	5.7	14.4	12.8
Total State	22.2	22.4	44.7	1.9	100.0

Communities

In Queensland, more than 3m hectares of land have been set aside, on the mainland and in the Torres Strait, for use by Aboriginals and Torres Strait Islanders.

Approximately 14,000 Aboriginals and Islanders, or one third of Queensland's indigenous population, live on these Reserve Communities, the remainder living as other Australians in localities, Towns, and Cities throughout the State. Each Reserve Community has an elected Aboriginal or Islander Council which is responsible largely for the day-to-day running of the Communities.

Town-planned facilities including water, sewerage, electricity, schools, libraries, hospitals, and sporting facilities have been established. Development is aimed at providing public facilities and amenities similar to those found in country towns of comparable size.

The Chairmen of elected Councils form the Aboriginal and Islander Advisory Councils to liaise and consult with the Government. A broadly-based Aboriginal and Islander Commission, including representatives from Queensland's Aboriginal, Torres Strait, and South Sea Islander communities, also reports on the needs of indigenous citizens living throughout the State.

Education

Pre-schools have been established on Reserve Communities and special programs in health and education developed to meet the special requirements.

Financial assistance is available through the Department of Aboriginal and Islanders Advancement for pre-school centres in the general community which have a significant enrolment of Aboriginal children.

In 1983 there were 593 children of pre-school age attending 22 kindergarten units established by the Department of Aboriginal and Islanders Advancement on Government Communities and on Torres Strait Islands. The majority of children attend kindergarten for two years before beginning primary school. In addition, 148 children living at Cherbourg (which also has a kindergarten mentioned above), Doomadgee, Aurukun, and Mornington Island Communities attended pre-schools conducted by the Queensland Department of Education. These children attend for one year only.

In 1983, 3,521 primary and 835 secondary students attended 30 government and 3 non-government (church) schools in the communities and Torres Strait villages. Children resident in country areas may enrol at government or non-government schools but no separate record of their numbers is kept.

The Aboriginal Secondary Grants Scheme, sponsored by the Commonwealth Education Department, provides assistance for all Aboriginal and Islander children to attend secondary school while the Aboriginal Study Grants Scheme enables students to continue their education beyond secondary level.

Aboriginal Culture

An Aboriginal Ranger Service is in operation to locate and preserve all material remnants of Aboriginal culture. The service is assisted by archaeologists and has recorded over 5,000 significant sites which are protected by State legislation in the form of the *Aboriginal Relics Preservation Act 1967-1976*. The Queensland Government has also set up a committee to advise on, and determine the anthropological value of such relics and the need for resuming land to ensure their preservation.

Government Expenditure

The amount expended from Consolidated Revenue by the Queensland Government on the general welfare and advancement of the State's Aboriginal and Islander population for the year ended 30 June 1983 totalled \$25,773,704. Expenditure from a Welfare Fund built up from the sale of produce, livestock, curios, etc. amounted to \$17,558,939 in 1982-83. Hospitalisation charges, borne by the Department of Health, are excluded. Details of Aboriginal health services are included in Chapter 10, Health, Section 1.

The Commonwealth Government provides assistance to Aboriginals through the Department of Aboriginal Affairs (DAA), the National Aboriginal Conference (NAC), the Aboriginal Development Commission (ADC), and several Commonwealth departments. The next table shows expenditure from these sources.

COMMONWEALTH EXPENDITURE ON ABORIGINAL ADVANCEMENT, 1982-83
(\$'000)

Particulars	Queensland			Australia		
	Expenditure by		Total	Expenditure by		Total
	Department of Aboriginal Affairs	Other Departments		Department of Aboriginal Affairs	Other Departments	
Housing	(a) 4,977	6,628	11,605	(a) 26,863	34,200	61,063
Health	5,905	369	6,274	23,849	1,893	25,742
Education	1,423	12,446	13,869	12,154	35,613	47,767
Employment	1,959	4,810	6,769	10,433	25,066	35,499
Social support	1,086	—	1,086	6,814	—	6,814
Community-management services	4,522	—	4,522	24,512	—	24,512
Culture and recreation	250	(b)	250	1,748	1,939	3,687
Legal aid	1,807	—	1,807	7,962	—	7,962
Training	383	—	383	4,804	—	4,804
Aboriginal hostels	(b)	—	(b)	(a) 10,312	—	10,312
Housing loans		—		(c) 13,009	—	13,009
Enterprises and land purchases		—		11,104	—	11,104
Transport and communication		—		300	—	300
Aboriginal sacred sites protection authority		—		—	—	—
Consultation and research	(b)	—	(b)	(d) 6,997	—	6,997
ADC (administration and capital fund less revenue)		—		1,218	—	1,218
Total	22,312	24,253	46,565	162,079	98,711	260,790

(a) Expenditure by the Aboriginal Development Council.
the Aboriginal Development Council.

(b) Not available or not applicable by State.
(d) Including expenditure by the National Aboriginal Conference.

(c) Including expenditure by

10 OTHER WELFARE SERVICES

Senior Citizens' Centres

The Commonwealth Government shares with the State and/or Local Government, on a two to one basis, the capital cost of approved senior citizens' centres. The Commonwealth, on a dollar for dollar basis, also supports a welfare officer employed by such a centre. During 1982-83 Commonwealth grants of \$933,515 for capital works were made, and the subsidies paid for welfare officers amounted to \$90,633.

Sport

The Department of Sport was established by the State Government in 1972 to administer the allocation of grants and subsidies to properly constituted sporting bodies covering 79 sports played in Queensland. Financial assistance is available for junior coaching, capital facilities, State team travel, hosting of national and international events, administration, State Directors of Coaching, seminars for officials and gifted sports people. In 1982-83 an amount of \$3,347,350 was made available for these purposes. Funds are derived from State Revenue, by way of the Sports and Youth Fund (Soccer Pools and Gold Lotto), and Consolidated Revenue.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Health and Welfare Establishments (4302.3) (*annual*)

Further References—*continued***Central Office Publications**

Census of Population and Housing, Counts of Aboriginals and Torres Strait Islanders, 30 June 1971, 1976, 1981 (2164.0) (*irregular*)

Social Indicators (4101.0) (*annual*)

Commonwealth Government Finance (5502.0) (*annual*)

Other Publications

Annual reports of the Department of Welfare Services, the Department of Children's Services, the Department of Aboriginal and Islanders Advancement, the Department of Sport, and the Commonwealth Departments of Aboriginal Affairs, Health, and Social Security.

Chapter 12

LABOUR FORCE

1 INTRODUCTION

The labour force statistics given in this chapter are based on data obtained from the various Population Censuses and estimates from the Labour Force Surveys and other sources.

The labour force is defined as the sum total of all persons in employment and those regarded as unemployed. Persons in employment consist of the total of employers, employees (otherwise called wage and salary earners), self-employed, and unpaid helpers. Unemployed persons comprise all those who have stated that they did not have a job, but indicated that they were looking for a job in a particular period. Unemployed persons also include those looking for their first job, or who were temporarily stood down.

This chapter makes general reference to the apprenticeship system, the operations of Local Trades Committees, and the nature of general employment facilities.

Since the effects of social, economic, and technological change are often accompanied by changes in employment levels, the establishment of special training and assistance schemes designed to meet the employment needs of displaced persons, re-entrants, and new entrants to the labour force have become necessary. These schemes are also mentioned briefly in this chapter.

2 LABOUR FORCE STATUS OF THE POPULATION

The following table gives details of the labour force status of the population of Queensland at the Censuses of 1976 and 1981.

Of the total persons in the labour force at 30 June 1981, 77.0 per cent were employees (77.8 per cent in 1976); 15.9 per cent self-employed or employers (15.8 per cent in 1976); 1.2 per cent unpaid helpers (1.8 per cent in 1976); and 6.0 per cent were unemployed (4.6 per cent in 1976).

At 30 June 1981, females represented 36.0 per cent of the labour force and 35.5 per cent of those employed. Corresponding figures at 30 June 1976 were 34.8 and 34.5 per cent.

There was a lower percentage of dependent population (i.e. persons not in the labour force) to total population in 1981 (55.8 per cent) than in 1976 (56.9 per cent). The increase since 1976 in

the number of persons not in the labour force was 10.6 per cent compared with an increase of those in the labour force of 15.4 per cent.

LABOUR FORCE STATUS OF THE POPULATION, QUEENSLAND
(^{'000})

Labour force status	Census 30 June 1976			Census 30 June 1981			Variation 1976-1981
	Males	Females	Persons	Males	Females	Persons	
In labour force							
Employed							
Employer and self-employed	94.3	44.0	138.4	110.4	51.1	161.4	23.0
Employee	450.8	232.4	683.2	501.4	278.3	779.7	96.5
Helper, unpaid	3.1	12.9	16.0	2.4	9.3	11.7	-4.3
Total employed	548.2	289.3	837.6	614.1	338.7	952.8	115.2
Unemployed	24.0	16.4	40.3	34.2	26.1	60.4	20.1
Total in labour force ..	572.2	305.7	877.9	648.4	364.8	1,013.2	135.3
Not in labour force	452.4	706.9	1,159.3	505.0	776.9	1,281.9	122.6
Total population	1,024.6	1,012.6	2,037.2	1,153.4	1,141.7	2,295.1	257.9

3 CHARACTERISTICS OF THE LABOUR FORCE

Persons in employment may be classified in two ways according to two distinct concepts: by industry and by occupation. Occupation, which is personal to the individual, is defined as the kind of work that a member of the working population personally performs. Industry is defined as any single branch of productive activity, trade, or service in which the individual carries on his or her occupation, and is determined by the nature of the product made or the service rendered by the business. Thus carpenters, labourers, or clerks working for a mining company are, industrially, engaged in mining. But a man who is by occupation a miner, working for a sewerage construction authority, is industrially classified under building and construction, and so forth.

With the increasing complexity of industry, persons of an increasing range of occupations will be found under one industry heading, and persons of a given occupation will be found in a wide range of industries.

Industry

Commencing with the 1971 Census a new system of industry coding called the Australian Standard Industrial Classification (ASIC) was applied. This system, which has the advantage of conversion to conform with the International Standard Industrial Classification, is designed to provide a standard framework for classifying establishments, e.g. shops, factories, etc., by industry. Consequently, this classification is utilised as part of an integrated statistical system to ensure, as far as possible, that each individual establishment is uniformly and consistently classified in all statistical compilations to the same industry, as determined by its primary activity. Strict comparability of labour force figures by industry between the 1971 and earlier Censuses is not possible because of the review of methods of classifying units and the special treatment of certain activities such as repair, installation, and leasing. Comparability is also restricted by the exclusion of unemployed persons from industry labour force figures for the 1971 Census, since unemployed persons were included in earlier Census industry totals.

The next table shows the number of persons employed by industry in Queensland and the percentage of persons employed in each of these industries at the Census of 30 June 1981.

INDUSTRY OF THE EMPLOYED POPULATION, QUEENSLAND, CENSUS 30 JUNE 1981

Industry	Males		Females		Persons	
	'000	%	'000	%	'000	%
<i>Agriculture, forestry, fishing, and hunting</i> ..	57.0	9.3	20.2	6.0	77.3	8.1
Agriculture and services to agriculture ..	52.9	8.6	19.6	5.8	72.5	7.6
Forestry and logging ..	2.2	0.4	0.2	0.1	2.4	0.3
Fishing, hunting, and undefined ..	2.0	0.3	0.4	0.1	2.3	0.2
<i>Mining</i> ..	17.7	2.9	1.6	0.5	19.4	2.0
Metallic minerals ..	5.9	1.0	0.6	0.2	6.5	0.7
Coal ..	7.3	1.2	0.4	0.1	7.7	0.8
Other and undefined ..	4.6	0.7	0.7	0.2	5.3	0.6
<i>Manufacturing</i> ..	99.0	16.1	25.2	7.5	124.2	13.0
Food, beverages, and tobacco ..	26.3	4.3	7.8	2.3	34.0	3.6
Textiles, clothing, and footwear ..	1.7	0.3	3.9	1.2	5.6	0.6
Wood, wood products, and furniture ..	11.2	1.8	2.1	0.6	13.3	1.4
Metal products, machinery ..	36.2	5.9	4.9	1.5	41.1	4.3
Other and undefined ..	23.6	3.8	6.5	1.9	30.2	3.2
<i>Electricity, gas, and water</i> ..	13.8	2.2	1.6	0.5	15.4	1.6
Electricity and gas ..	10.3	1.7	1.4	0.4	11.8	1.2
Water, sewerage, drainage, and undefined ..	3.4	0.6	0.2	0.1	3.7	0.4
<i>Construction</i> ..	63.8	10.4	8.1	2.4	71.9	7.5
<i>Wholesale and retail trade</i> ..	102.0	16.6	73.3	21.6	175.3	18.4
Wholesale and undefined ..	40.2	6.5	14.7	4.3	54.9	5.8
Retail ..	61.8	10.1	58.6	17.3	120.3	12.6
<i>Transport and storage</i> ..	50.1	8.2	7.9	2.3	58.0	6.1
Road transport ..	17.9	2.9	3.8	1.1	21.7	2.3
Rail transport ..	20.3	3.3	0.9	0.3	21.2	2.2
Water transport ..	4.7	0.8	0.5	0.2	5.2	0.5
Air transport ..	4.4	0.7	1.2	0.3	5.6	0.6
Other transport, storage, and undefined ..	2.8	0.5	1.4	0.4	4.2	0.4
<i>Communication</i> ..	15.6	2.5	5.1	1.5	20.7	2.2
<i>Finance, insurance, real estate, and business services</i> ..	41.7	6.8	33.2	9.8	74.9	7.9
<i>Public administration and defence</i> ..	42.3	6.9	12.1	3.6	54.4	5.7
<i>Community services</i> ..	49.3	8.0	81.8	24.2	131.1	13.8
Health ..	14.0	2.3	39.5	11.7	53.5	5.6
Education ..	19.7	3.2	32.7	9.7	52.4	5.5
Other and undefined ..	15.6	2.5	9.5	2.8	25.1	2.6
<i>Entertainment, recreation, hotels, and restaurants</i> ..	21.9	3.6	30.7	9.1	52.6	5.5
Entertainment and recreation ..	6.2	1.0	5.5	1.6	11.7	1.2
Restaurants, hotels, and clubs ..	12.7	2.1	18.7	5.5	31.4	3.3
Other and undefined ..	3.0	0.5	6.5	1.9	9.5	1.0
<i>Other, not elsewhere classified and not stated</i> ..	39.9	6.5	37.8	11.2	77.8	8.2
Total ..	614.1	100.0	338.7	100.0	952.8	100.0

Occupation

Classification of occupations follows the principles and structure of the International Standard Classification of Occupations, adapted to fit, as far as practicable, the known occupational structure of the Australian labour force. Classification on this basis has been adopted since the 1961 Census.

The next table shows the number of persons employed in occupation groups at the Census of 30 June 1981.

OCCUPATION OF THE EMPLOYED POPULATION, QUEENSLAND, CENSUS 30 JUNE 1981

Occupation	Males		Females		Persons	
	'000	%	'000	%	'000	%
<i>Professional, technical, and related workers</i> ..	57.3	9.3	52.8	15.6	110.2	11.6
<i>Administrative, executive, and managerial workers</i>	39.6	6.4	7.1	2.1	46.7	4.9
<i>Clerical workers</i>	46.9	7.6	104.5	30.9	151.4	15.9
<i>Sales workers</i>	44.6	7.3	45.0	13.3	89.6	9.4
<i>Farmers, fishermen, hunters, timbergetters, and related workers</i>	60.9	9.9	18.4	5.4	79.3	8.3
Farmers, farm workers, and wool classers ..	57.3	9.3	18.2	5.4	75.4	7.9
Hunters and timber workers	2.0	0.3	—	—	2.0	0.2
Fishermen	1.6	0.3	0.2	—	1.8	0.2
<i>Miners, quarrymen, and related workers</i> ..	7.5	1.2	0.1	—	7.6	0.8
<i>Workers in transport and communication</i> ..	44.8	7.3	6.3	1.8	51.1	5.4
Shipping and air transport workers ..	2.9	0.5	0.1	—	2.9	0.3
Rail transport workers	9.1	1.5	0.2	0.1	9.3	1.0
Road transport workers	27.7	4.5	1.7	0.5	29.5	3.1
Other	5.2	0.8	4.3	1.3	9.4	1.0
<i>Tradesmen, production-process workers, and labourers</i>	239.0	38.9	19.3	5.7	258.3	27.1
Textile and leather workers	2.9	0.5	3.2	0.9	6.0	0.6
Metal and electrical workers	88.4	14.4	1.7	0.5	90.1	9.5
Wood-working and building workers ..	49.0	8.0	0.9	0.3	49.9	5.2
Other production-process workers	29.1	4.7	10.1	3.0	39.2	4.1
Labourers, other, n.e.c.	69.6	11.3	3.5	1.0	73.1	7.7
<i>Service, sport, and recreation workers</i>	30.6	5.0	49.9	14.7	80.5	8.5
<i>Members of armed services</i>	13.1	2.1	0.7	0.2	13.8	1.4
<i>Occupation inadequately described or not stated</i>	29.8	4.9	34.6	10.2	64.4	6.8
Total	614.1	100.0	338.7	100.0	952.8	100.0

Distribution of Labour Force

The next two tables show the numbers in the labour force by age groups in each Statistical Division at the Census of 30 June 1981.

DISTRIBUTION OF THE MALE LABOUR FORCE, QUEENSLAND, CENSUS 30 JUNE 1981

Statistical Division	Age group (years)						Proportion in each Division
	15-19	20-24	25-44	45-64	65 and over	All ages	
	'000	'000	'000	'000	'000	'000	%
Brisbane	29.6	41.6	139.4	75.9	3.5	290.1	44.7
Moreton	8.4	11.4	41.4	22.4	2.0	85.7	13.2
Wide Bay-Burnett	4.7	5.2	18.7	11.4	1.0	40.9	6.3
Darling Downs	5.0	6.1	19.5	12.1	1.4	44.1	6.8
South-West	1.0	1.2	3.7	2.3	0.3	8.5	1.3
Fitzroy	5.1	7.0	21.3	10.6	0.7	44.6	6.9
Central-West	0.7	0.8	2.0	1.4	0.1	4.9	0.8
Mackay	3.0	4.3	14.2	6.6	0.5	28.5	4.4
Northern	4.6	7.5	21.7	11.5	0.7	46.0	7.1
Far North	3.8	5.4	19.9	10.7	0.7	40.6	6.3
North-West	1.5	2.3	6.7	2.9	0.1	13.5	2.1
<i>Migratory</i>	—	0.1	0.4	0.4	—	0.9	0.1
Total	67.5	92.9	308.9	168.2	11.0	648.4	100.0

DISTRIBUTION OF THE FEMALE LABOUR FORCE, QUEENSLAND, CENSUS 30 JUNE 1981

Statistical Division	Age group (years)						Proportion in each Division
	15-19	20-24	25-44	45-64	65 and over	All ages	
	'000	'000	'000	'000	'000	'000	%
Brisbane	28.0	33.0	77.0	33.9	2.2	174.2	47.7
Moreton	7.5	8.2	22.3	10.4	1.0	49.5	13.6
Wide Bay-Burnett	4.0	3.3	9.6	4.9	0.5	22.2	6.1
Darling Downs	4.4	4.0	10.5	6.0	0.7	25.7	7.0
South-West	0.6	0.6	1.8	1.1	0.1	4.2	1.2
Fitzroy	3.9	3.8	9.2	3.9	0.3	21.1	5.8
Central-West	0.4	0.3	0.9	0.6	—	2.2	0.6
Mackay	2.4	2.5	6.1	2.5	0.2	13.7	3.8
Northern	4.1	4.6	10.5	4.5	0.3	24.0	6.6
Far North	3.3	3.8	10.4	4.4	0.3	22.3	6.1
North-West	1.0	1.0	2.6	0.9	0.1	5.5	1.5
Migratory	—	—	0.1	0.1	—	0.2	0.1
Total	59.6	65.3	161.0	73.0	5.9	364.8	100.0

Persons in Employment in Industries

The next table shows the percentage distribution of persons in employment in industry groups at selected Census dates since 1933. Unemployed persons are excluded throughout and persons in the 'not stated' category have been distributed pro rata.

The comparability of the Census ratios of industry groups to total employment is affected by changed concepts and definitions. Some of the changes have been the inclusion of all females working part-time, the exclusion of trainee teachers, and the introduction of the Australian Standard Industrial Classification. The table shows, in broad terms, the movement over time of employment from primary industries to the manufacturing industries to the service industries.

PROPORTIONS OF EMPLOYED PERSONS IN INDUSTRY GROUPS, QUEENSLAND
(per cent)

Industry group	June 1933	June 1947	June 1954	June 1976	June 1981
Primary	30	23	21	10	9
Mining	2	2	2	2	2
Manufacturing	14	21	22	16	16
Building and construction	13	9	10	10	8
Transport and communication	8	11	10	8	9
Finance and property	2	2	3	8	9
Commerce	13	13	15	20	20
Public administration, n.e.c., and professions	9	13	13	20	21
Personal and domestic	9	6	5	6	6
Total	100	100	100	100	100

4 LABOUR FORCE SURVEYS

Monthly Labour Force Surveys

Information gathered in these surveys, obtained by personal interview rather than by the normal procedure of having an individual complete a form, provides the basis for deriving estimates of certain population characteristics. Chapter 24, Section 4, contains a detailed description of the various household surveys carried out by the Australian Bureau of Statistics.

The Labour Force Survey was the first household sample survey undertaken. Persons within the scope of the survey, generally those aged 15 years and over, are asked a set of questions, each month, which determines the person's activity during survey week in respect of his labour force category. The answers to these questions can be used to derive estimates of

numbers of persons of each sex employed, unemployed, and not in the labour force, respectively, according to demographic characteristics, such as age, marital status, and birthplace.

For employed persons, information on occupation, industry, and number of hours worked is also gathered each quarter. Unemployed persons are asked questions on their occupation, the industry in which they last worked, and the duration of unemployment, as well as whether they are looking for full-time or part-time work.

Estimates, of the employment status of the civilian population aged 15 years and over, for Queensland, are derived from a sample of slightly more than two-thirds of 1 per cent of the population of the State. More detailed information on the Labour Force Surveys, including definitions used, technical data on the estimation procedure, and reliability of the estimates, can be obtained from the ABS publication *The Labour Force* (Catalogue No. 6201.3).

Employment Status

The following table shows, for Queensland, estimates of the employment status of the civilian population, 15 years of age and over.

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER BY EMPLOYMENT STATUS, QUEENSLAND

June	Employed	Unemployed		Total labour force		Not in labour force	Civilian population aged 15 years and over
		Number	Unemployment rate (a)	Number	Participation rate (b)		
	'000	'000	%	'000	%	'000	'000
MALES							
1978	572.1	40.8	6.7	612.9	78.5	167.5	780.4
1979	595.2	33.5	5.3	628.8	78.3	173.8	802.6
1980	604.7	34.0	5.3	638.8	77.3	187.7	826.5
1981	623.5	27.9	4.3	651.4	76.3	202.6	854.0
1982	639.7	31.1	4.6	670.8	76.0	212.0	882.8
1983	626.7	67.4	9.7	694.1	76.3	215.1	909.2
MARRIED FEMALES							
1978	170.0	9.0	5.0	179.0	35.5	324.6	503.6
1979	182.2	11.6	6.0	193.8	38.1	315.2	508.9
1980	187.7	13.2	6.6	200.9	38.9	314.9	515.8
1981	198.1	10.9	5.2	209.0	38.7	331.1	540.1
1982	207.7	13.6	6.2	221.4	39.8	335.0	556.4
1983	204.4	17.1	7.7	221.5	38.9	348.1	569.6
OTHER FEMALES (c)							
1978	125.4	16.8	11.8	142.1	49.2	146.9	289.1
1979	129.3	18.8	12.7	148.1	48.4	157.7	305.8
1980	143.0	21.8	13.2	164.9	51.0	158.3	323.2
1981	140.8	16.3	10.4	157.1	47.9	170.7	327.7
1982	144.1	19.9	12.1	164.0	48.1	176.8	340.8
1983	150.5	23.4	13.5	173.9	49.1	180.0	353.9
ALL FEMALES							
1978	295.4	25.8	8.0	321.1	40.5	471.5	792.7
1979	311.5	30.4	8.9	341.9	42.0	472.8	814.7
1980	330.7	35.1	9.6	365.8	43.6	473.2	839.0
1981	338.9	27.2	7.4	366.1	42.2	501.8	867.8
1982	351.8	33.6	8.7	385.4	43.0	511.8	897.2
1983	354.8	40.5	10.3	395.4	42.8	528.2	923.5

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER BY EMPLOYMENT STATUS, QUEENSLAND—*continued*

June	Employed	Unemployed		Total labour force		Not in labour force	Civilian population aged 15 years and over
		Number	Unemployment rate (a)	Number	Participation rate (b)		
	'000	'000	%	'000	%	'000	'000
PERSONS							
1978	867.5	66.6	7.1	934.0	59.4	639.1	1,573.1
1979	906.7	63.9	6.6	970.6	60.0	646.6	1,617.3
1980	935.4	69.1	6.9	1,004.5	60.3	661.0	1,665.5
1981	962.4	55.1	5.4	1,017.5	59.1	704.3	1,721.8
1982	991.5	64.7	6.1	1,056.2	59.3	723.9	1,780.0
1983	981.5	107.9	9.9	1,089.5	59.4	743.2	1,832.7

(a) The number of unemployed in each group as a percentage of the labour force in the same group. (b) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group. (c) Never married, widowed, and divorced.

The next table shows, for each State and Australia, estimates of the employment status of the civilian population 15 years of age and over.

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER BY EMPLOYMENT STATUS,
STATES AND TERRITORIES, JUNE 1983
(^{'000})

State or Territory	Employed	Unemployed	Total labour force	Not in labour force	Civilian population aged 15 years and over
New South Wales	2,172.4	259.1	2,431.5	1,635.9	4,067.4
Victoria	1,668.3	168.0	1,836.3	1,216.8	3,053.1
Queensland	981.5	107.9	1,089.5	743.2	1,832.7
South Australia	538.6	67.9	606.5	422.5	1,029.0
Western Australia	569.9	59.6	629.5	384.7	1,014.1
Tasmania	167.6	19.1	186.6	136.4	323.0
Northern Territory	62.2	3.8	66.0	24.3	90.3
Australian Capital Territory	106.0	7.7	113.7	49.2	162.9
Australia	6,266.5	693.2	6,959.7	4,613.0	11,572.6

Supplementary Labour Force Surveys

As stated in Chapter 24, Section 4, the population survey master sample is also a vehicle for conducting supplementary surveys on a wide range of topics. Set out below are some of the recent labour-force oriented supplementary surveys conducted in conjunction with the Labour Force Surveys. It should be noted that because of the size of the sample, reliable estimates for particular characteristics may be restricted to the national level.

Labour Force Educational Attainment

A survey to obtain information about the highest educational qualifications attained by persons in the labour force was conducted in February 1983. For persons with post-school qualifications the information obtained included the field of study, and for those who did not complete their schooling, the age at which they had left school. In Queensland, of the 955,600 persons employed, 384,200 had post-school qualifications and of the 124,100 unemployed, 66,700 persons left before completing the highest level of secondary school. For further information see the ABS publication *Labour Force Status and Educational Attainment* (Catalogue No. 6235.0).

Labour Mobility

Aspects of the mobility of persons who had been employed at some time during the period February 1982 to February 1983 were surveyed in February 1983. Details collected included the number of different employers for whom employees had worked during this period or the number of different businesses in which employers and self-employed persons had been engaged. In Queensland, of the 969,800 persons employed at the time of the survey, 226,300 had been in their current job for less than 12 months while 148,400 had been there for 10 years or more. For further information see the ABS publication *Labour Mobility* (Catalogue No. 6209.0).

Transition from Education to Work

Information about persons aged 15 to 64 years who had attended full-time at a school, university, or other educational institution at some time during 1982 was obtained in a survey conducted in May 1983. Separate information was obtained in respect of persons who had returned to full-time education in 1983 and those who had not returned to full-time education (leavers). During 1982 there was a total of 47,800 leavers aged 15 to 24 years throughout Queensland, of which 37,400, or 78.2 per cent, found employment, and 7,900, or 16.5 per cent, were unemployed. For further information see the ABS publication *Transition from Education to Work* (Catalogue No. 6227.0). Previous issues of this publication were entitled *Leavers from Schools, Universities, or Other Educational Institutions*.

Persons Looking for Work

In July 1983 the supplementary survey sought information about unemployed persons who had recently been looking for work. Details collected included particulars of their last job, difficulties experienced in finding a job, educational attainment, family status, steps taken to find work, whether they had had offers of employment, and whether they would move interstate or intrastate if offered a suitable job. In Queensland there were 107,600 people looking for work in July 1983 who experienced difficulty in finding a job. Of these, 35,800 reported no vacancies at all and 21,300 no vacancies in their line of work as the main difficulty in finding work. For further information see the ABS publication *Characteristics of Persons Looking for Work* (Catalogue No. 6222.0).

Persons Not in the Labour Force

In March 1983 a survey was conducted in order to obtain information about persons aged 15 to 64 years who were not in the labour force; in particular, whether they wanted a job, and, if they did, the reason they were not looking for work. In Queensland, in March 1983, of those who were not in the labour force and who wanted a job, there were 26,500 males and 95,200 females who were not actively looking for work. A similar survey conducted in March 1982 showed corresponding figures of 19,600 males and 82,300 females who were not actively looking for work. Further information is available in the ABS publication *Persons Not in the Labour Force* (Catalogue No. 6220.0).

Labour Force Experience

A survey was conducted in February 1983 to obtain information on persons who were in the labour force at some time during the last 12 months. Of the 1,188,300 persons who worked some time in the last 12 months in Queensland, 323,500 were in the labour force for less than one year and 864,800 were in the labour force for the 12 months. For further information see the ABS publication *Labour Force Experience* (Catalogue No. 6206.0).

Alternative Working Arrangements

During the period March to May 1982 a survey was conducted throughout Australia to obtain information on employees' working arrangements and preferences for any changes to them. In Queensland, of the 629,300 permanent workers who worked more than 10 hours a

week, 50,200 preferred casual work, and of the 105,500 casual workers, 53,900 preferred permanent work. Further information can be obtained in the ABS publication *Alternative Working Arrangements* (Catalogue No. 6341.0).

Weekly Earnings of Employees

In August 1982 a survey was conducted to ascertain weekly earnings and frequency of pay of wage and salary earners. In Queensland, mean weekly earnings from all jobs were \$315 for full-time males and \$237 for full-time females. Comparable figures for Australia were \$322 and \$245, respectively. Further information is available in the ABS publication *Weekly Earnings of Employees (Distribution)* (Catalogue No. 6310.0).

5 INDUSTRY AND COMMERCE TRAINING

Under the *Industry and Commerce Training Act 1979–1983* the Industry and Commerce Training Commission was formed. This Commission replaced the Apprenticeship Executive. The Commission comprises the Commissioner for Training, who is the Chairman, the Director, Division of Technical and Further Education, and not more than 12 persons, nominated by the Minister, appointed in equal numbers representing employers and employees.

Assisting the Commission there are a number of Industry and Commerce Advisory Committees. Each Committee consists of the Deputy Commissioner for Training, who is the Chairman, a member ex-officio nominated by the Director, Division of Technical and Further Education by reference to the title of the office that he holds for the time being, and such number of other persons as the Minister determines, consisting of equal numbers of employees' and employers' representatives. The Industry and Commerce Training Commission and its Advisory Committees advise the Minister and are responsible for all matters relating to apprenticeship and for the co-ordination and oversight of training in industry and commerce for tradesmen and other skilled workers. At 30 June 1983 there were 22 Industry and Commerce Advisory Committees in Brisbane.

In each of the larger country centres there is a Regional Advisory Committee to deal locally with apprenticeship and training matters and any other matters referred to it by Industry and Commerce Advisory Committees or the Industry and Commerce Training Commission. At 30 June 1983 there were 17 Regional Advisory Committees in country centres.

Apprenticeship

Most apprentices are indentured at 15 or 16 years of age. The period prescribed for apprenticeship is four years in most trade callings and during that period apprentices are required to attend classes at colleges of technical and further education at convenient centres to receive tuition in their trade calling. Technical education is provided by the Division of Technical and Further Education, Department of Education.

There is provision, under the *Industry and Commerce Training Act 1979–1983*, for persons who have gained suitable experience and knowledge prior to commencing an apprenticeship, to be indentured for less than the prescribed period. There are also provisions, under the Act, to reduce the period of apprenticeship when apprentices attain high standards of education and trade experience or an average of 75 per cent or more in all subjects at an annual examination during apprenticeship.

In 1972 the Block Release Training Scheme was introduced for all callings in the printing industry. Under this scheme apprentices receive instruction at colleges of technical and further education for continuous periods of up to seven weeks each year during the first three years of the apprenticeship. The scheme has been extended to apprentices in all apprenticeship trades except hairdressing and replaces correspondence tuition and single-day attendance at college in these trades.

At the end of December 1982 there were 10,332 apprentices attending technical colleges in Brisbane, 5,766 attending classes at 11 centres outside Brisbane, and 655 taking correspondence courses. The last two numbers include some apprentices who were simultaneously taking some subjects at technical colleges and others by correspondence. For 1981 the numbers were 9,443, 5,231, and 563, respectively. The proportion of passes at the annual examinations is usually high, 97.6 per cent of the apprentices attending technical colleges and 88.9 per cent of those taking correspondence courses being successful at the 1982 examination.

APPRENTICES (a) BY TRADES, QUEENSLAND
(Source: Queensland Department of Employment and Industrial Affairs)

Trade	Intake of new apprentices during year						Indentures completed 1982-83	Number indentured at 30 June 1983
	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83		
<i>Building trades</i>	683	753	1,374	1,736	1,521	774	812	4,710
Carpentry and joinery	324	395	650	867	746	383	417	2,373
Painting	68	76	160	161	139	85	73	450
Plumbing	195	175	253	342	313	177	179	994
Other building trades	96	107	311	366	323	129	143	893
<i>Electrical trades</i>	586	478	776	910	971	677	486	3,132
<i>Engineering</i>	1,337	1,654	2,259	2,639	2,540	1,409	1,612	8,336
Boilermaking	208	319	495	690	702	314	320	2,122
Fitting and turning	423	456	593	674	511	395	462	2,150
Motor mechanics	450	503	662	694	657	388	497	2,240
Other engineering	256	376	509	581	670	312	333	1,824
<i>Hairdressing: Gentlemen's</i> ..	14	16	23	12	14	9	14	40
<i>Ladies'</i>	336	446	575	601	646	574	287	2,011
<i>Other trades</i>	833	939	1,378	1,293	1,453	924	811	4,378
Total	3,789	4,286	6,385	7,191	7,145	4,367	4,022	22,607

(a) From 1979-80 includes probationers.

There are a number of apprentices, indentured under certain Federal awards, who do not come within the scope of the State apprenticeship training system. These apprentices, mainly in the graphic arts and meat industry trades, are comparatively few in number. During 1982-83 new indentures taken out under the relevant Federal awards numbered 190. Statistics of this group of apprentices are not included in the tables.




The next table shows the numbers of apprentices employed and the numbers of apprentices who began and ceased during the year.

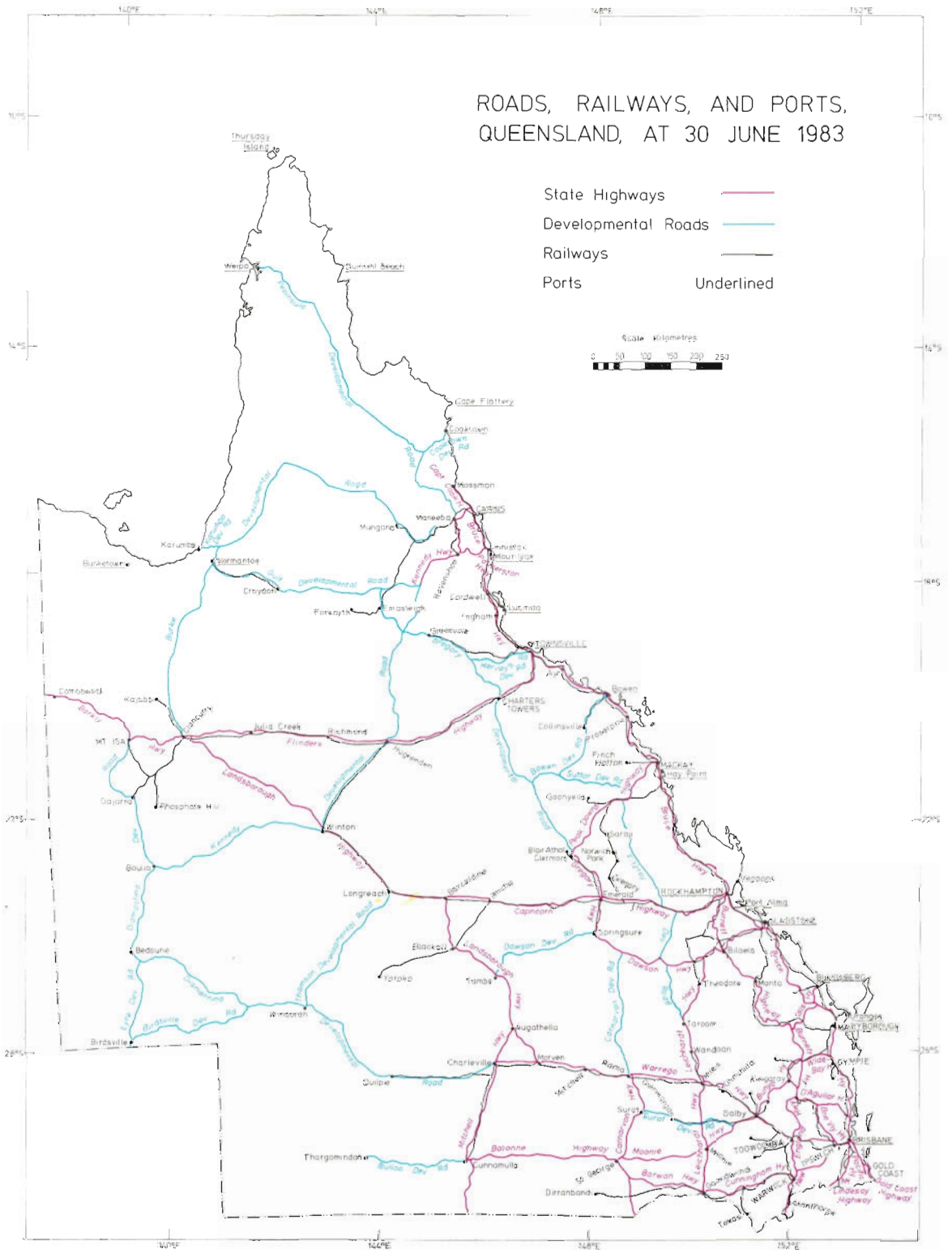
APPRENTICES (a), QUEENSLAND
(Source: Queensland Department of Employment and Industrial Affairs)

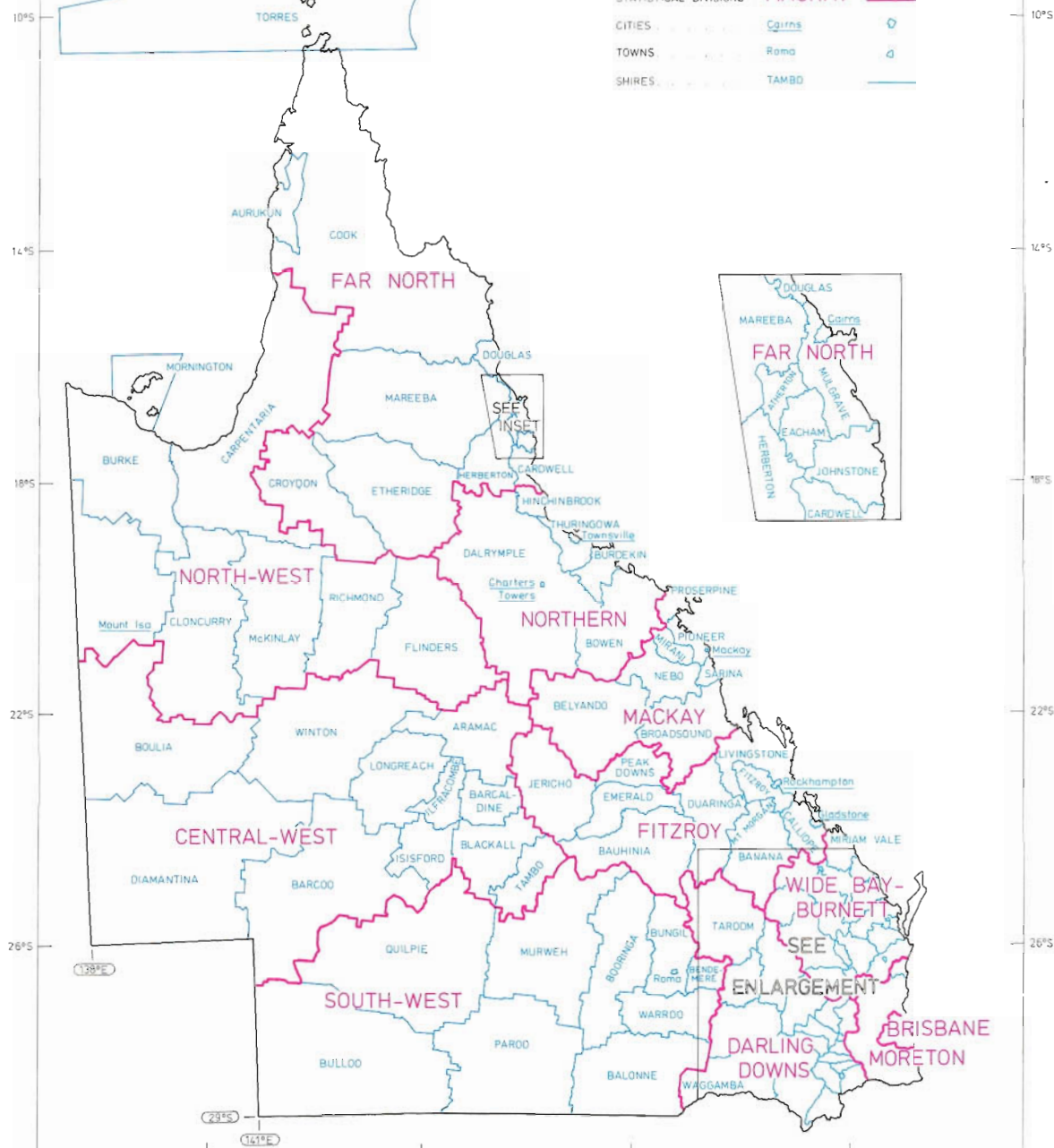
Year	New apprentices	Apprenticeships completed	Apprenticeships cancelled	Apprenticeships lapsed	Apprentices employed at the end of year
1977-78	3,789	4,426	863	<i>n.a.</i>	18,780
1978-79	4,286	3,402	974	<i>n.a.</i>	18,690
1979-80	6,385	3,207	823	189	21,292
1980-81	7,191	4,814	1,314	355	22,373
1981-82	7,145	5,024	1,057	337	23,467
1982-83	4,367	4,022	1,358	261	22,607

(a) Prior to 1979-80 relating only to indentured apprentices and excluding apprentices who were on probation and apprenticeships that had lapsed. From 1979-80 relating to the total number of apprentices employed. Consequently, from 1979-80 the number of apprenticeships lapsed has been shown and the number of apprentices employed includes apprentices who were on probation. At the end of 1982-83 there were 250 apprentices on probation.

ROADS, RAILWAYS, AND PORTS,
QUEENSLAND, AT 30 JUNE 1983

- State Highways 
Developmental Roads 
Railways 
Ports Underlined





SOUTH-EASTERN QUEENSLAND
LOCAL AUTHORITIES
AT 30 JUNE 1983

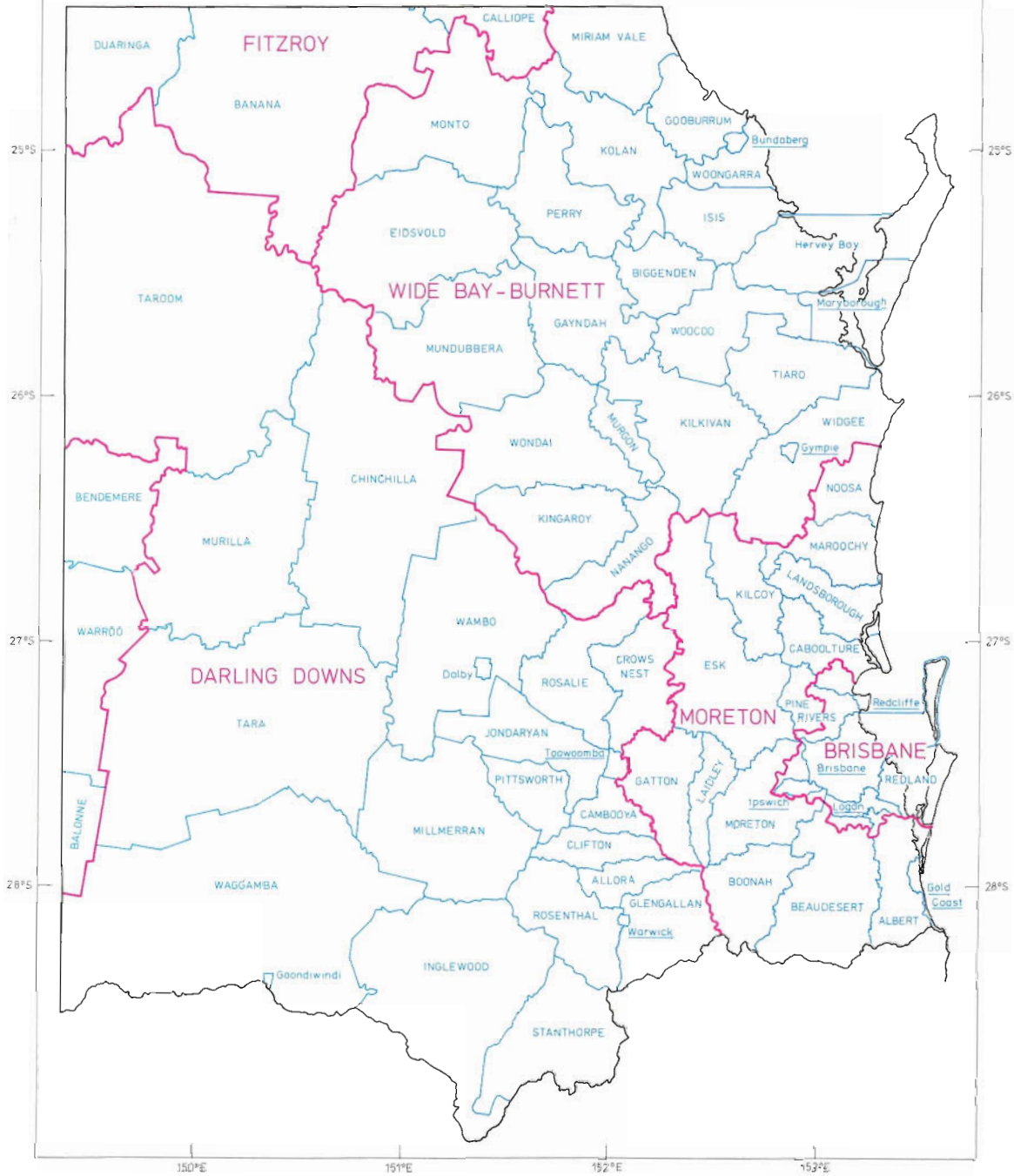
CITIES

SHIRES

loswich

Dolby

WONDAI





TRANSPORT AND COMMUNICATION—Chapter 14

Photo: Queensland Railway Department

Drenching sheep for worms

The centre engines of a giant coal train about to pass the loading point. Goonyella

AGRICULTURAL INDUSTRIES—Chapter 16

Photo: Department of Commercial and Industrial Development



Manpower Planning

A Manpower Planning Branch has been established in the Office of the Industry and Commerce Training Commission and its functions are: (a) to advise the Commission through the Commissioner on such matters as it thinks fit to ensure that, as far as practicable, there is in the State a sufficient number of qualified persons who are trained sufficiently to meet the present and the anticipated future needs of industry and commerce and of the State generally; (b) to conduct such surveys and undertake such investigations and inquiries as the Commission thinks necessary or as the Minister directs for the purpose of carrying out its functions; and (c) to submit reports of surveys conducted and investigations and inquiries undertaken and make recommendations for consideration by the Commission or, as the case may be, the Minister.

Pre-apprenticeship and Pre-vocational Training

The Pre-vocational Program and the Pre-apprenticeship Program are full-time training programs intended primarily for young school leavers as a transition from school to employment. The courses are designed to allow the student to develop immediately usable basic skills and technical knowledge. The Industry and Commerce Advisory Committee for the prescribed calling determines the period of time by which the period of apprenticeship may be reduced in the case of a person who successfully completes a Pre-vocational or a Pre-apprenticeship Program. An indenture, when entered into, shall take into account that period. Furthermore, exemption of part of the Technical Course of Instruction is granted to apprentices who successfully complete one of these programs.

Adult Trainees

The Industry and Commerce Training Commission may from time to time determine the number of persons to be trained as adult trainees in any apprenticeship calling or portion thereof, other than under an indenture of apprenticeship, and the number of adult trainees that an employer may employ.

Trainee Technicians

The Industry and Commerce Training Commission has authority under the Act to recommend to the Minister that provision be made for the training of trainee technicians in such industries where it is considered necessary.

Certificate of Recognition

The Industry and Commerce Training Commission has authority to issue an appropriate certificate in recognition of any work or training previously performed by a person if it is satisfied that the person has the necessary experience and expertise in an occupation.

6 LOCAL TRADES COMMITTEES

The Commonwealth *Tradesmen's Rights Regulation Act* 1946, with its machinery of Central and, in the States, Local Trades Committees chaired by representatives of the Department of Employment and Industrial Relations and with members drawn from employers' and employees' organisations, was originally enacted to safeguard the rights of tradesmen in the skilled metal and electrical trades. Later it was extended to cover admission to these trades of certain classes of ex-service personnel and migrants. Tradesmen's Certificates are granted as evidence of trade qualifications to those who meet the requirements of Local Trades Committees.

Before a recognised electrical tradesman can be employed on electrical operations in a State or Territory, however, in addition to the Certificate, he must be licensed by the State or Territory.

Separate committees represent the blacksmithing and boilermaking, electrical, engineering, sheet metal, and bootmaking trades, with secretarial assistance provided by the Department of Employment and Industrial Relations.

OPERATIONS OF LOCAL TRADES COMMITTEES, QUEENSLAND
(Source: Commonwealth Department of Employment and Industrial Relations)

Year	Applicants for certificates				Certificates granted			
	Migrants	Ex-servicemen	Other persons	Total	Migrants	Ex-servicemen	Other persons	Total
1978	381	104	177	662	226	79	62	367
1979	367	109	180	656	193	86	68	347
1980	490	73	219	782	294	62	105	461
1980-81 (a)	689	87	272	1,048	411	81	123	615
1981-82	866	113	247	1,226	496	103	124	723
1982-83	1,107	89	242	1,438	718	67	96	881

(a) Recording period changed during 1981 to a financial year basis (previous periods are not available on the same basis).

7 GENERAL EMPLOYMENT FACILITIES

Commonwealth Employment Service

The Department of Employment and Industrial Relations, through the Commonwealth Employment Service, provides facilities, free of charge, for employers requiring staff and persons seeking employment or vocational counselling. It maintains offices of the Commonwealth Employment Service throughout the State, and agencies of the Service are located in many of the larger towns where there is no full-time office.

Facilities for young people seeking advice about occupations, apprenticeships (including the Commonwealth Rebate for Apprentice Full-time Training Scheme), and employment assistance are available from the Commonwealth Employment Service. The Service also provides counselling and employment assistance for particular groups such as Aborigines, handicapped persons, and migrants.

Community Employment Program

The Community Employment Program (CEP) provides State and Territory governments, Local Authorities, and community organisations with grants with which to develop labour intensive projects which improve community facilities and services. Priority is given to projects in areas of high unemployment, projects which will provide employment for members of groups, such as women, Aborigines, migrants with language difficulties, and the disabled who are disadvantaged in the labour market, and projects which will lead to permanent jobs being created and help develop marketable skills.

8 EMPLOYMENT TRAINING AND ASSISTANCE SCHEMES

Because of changing demands for employment skills resulting from social, economic, and technological influences, it has become necessary for governments to provide training facilities and assistance for persons affected by such changes. In addition, manpower training policies have been adopted to provide special assistance for groups considered to be at a particular disadvantage in the labour force, to assist unemployed young people into the permanent labour force, and to foster greater mobility and flexibility in the labour market. A brief description of the manpower training programs offered by the Commonwealth and State governments is listed below.

Trade Training Programs

The Commonwealth Rebate for Apprentice Full-time Training (CRAFT) Scheme—This Scheme provides employers with an incentive to increase the number of apprentices they employ and to improve the quality of training. The Scheme generally provides tax-exempt rebates for day release to approved technical education colleges and off-the-job training. Employers may qualify for special higher rebate for release to approved technical education colleges if they indenture apprentices who have completed an approved trade-based pre-employment course. Living-away-from-home allowances are available for apprentices.

The Group One Year Scheme—This is a special apprentice training scheme which provides training within Commonwealth and State authorities for first-year apprentices. Trainees are indentured to private employers but are trained at government establishments for their first year before returning to their employer for the remainder of their apprenticeship.

The Special Assistance Program—This Program provides assistance to employers who take on apprentices who are out of trade.

The Group Apprentice Support Program—This Program is a joint Commonwealth and State support scheme designed to assist employers and industry associations for costs associated with the employment of additional staff required to administer new or expanded group apprentice schemes.

Special Trade Training Program—Special programs, such as accelerated or mature-age training to meet skilled worker shortages, can attract subsidies over and above normal CRAFT rebates. These arrangements are subject to negotiation with State Governments and employer and union groups.

Skills Training Programs

Skills in Demand—This is a manpower program to provide assistance to employers and employees to meet industry-wide shortages in key occupations where previously there has been a lack of suitable training. Priority is given to the training of unemployed people with a guarantee of employment for those trained. Assistance may be given in the form of a formal training allowance for unemployed persons registered with the CES to undertake approved training at educational institutions, or in the form of a subsidy for on-the-job training where this is considered the most appropriate way to develop the skill.

Industry Training Services Program—This is a program to aid and stimulate the development of training programs throughout all sections of industry and supports the National Training Council and the training activities of almost 100 industry training committees. Subsidies are paid for activities associated with the development of improved industry training within Australia.

Youth Training Program

The Youth Training Program assists young people to make the transition from school to stable employment. There are two main aspects to the program. These are the School to Work Transition Program, including Assistance for Pre-apprentice Students, and the Work Experience Program.

School to Work Transition Program—People who are having serious difficulty in finding work can attend pre-apprenticeship, pre-vocational, and pre-employment training courses at TAFE colleges under the School to Work Transition Program. This Program also provides educational opportunities by funding projects such as link courses, alternative courses, and work experience programs in schools. Courses are also held for young persons experiencing literacy and numeracy problems.

Work Experience Program—The Work Experience Program or Special Youth Employment Training Program (SYETP) helps employers take on young people who have had

difficulties finding stable employment. Employers are subsidised to bring the new employees up to a level where they are able to compete with others for jobs. Employers must provide the proper trainee supervision and pay the award or going rate.

Training for Special Groups

Aboriginals—The Training for Aboriginals Program (TAP) forms part of the range of employment and training programs under the National Employment Strategy for Aboriginals. One of the major aims of the program is to remove the substantial labour market disadvantage experienced by Aboriginals. Assistance is available in the form of a subsidy to employers who agree to provide on-the-job training for Aboriginal job seekers. Living-away-from-home allowances and formal training allowances are available for eligible people. The Government also provides promotional activities to boost employment opportunities for Aboriginals in private industry and skilled training and work experience for Aboriginals in a wide range of occupations in Commonwealth and State Government departments and authorities.

Disabled Persons—A wide range of services and training is provided for the physically and mentally disabled to assist them in finding employment. Formal training allowance and on-the-job training subsidy are available to the disabled. In addition they are eligible for tutorial assistance, local fares assistance, and grants for purchase of training aids. Assistance is available to employers for modification of the workplace to meet the needs of the disabled. Disabled persons are also assisted in finding employment through community-based agencies. The agencies are paid a fee for service and the trainees receive the formal training allowance.

Employment Services

Relocation Assistance Scheme (RAS)—If a job cannot be filled locally this Scheme assists persons who are unemployed to move to the locality to take on that job. The Scheme also assists persons who are already or are about to become unemployed and who are unlikely to obtain employment in their current locality.

Fares Assistance Scheme (FAS)—This Scheme pays the cost of public transport so unemployed persons can attend job interviews which have been arranged by the Commonwealth Employment Service.

Youth Affairs Assistance

Community Youth Support Scheme (CYSS)—This Scheme provides funds for community groups offering assistance to young unemployed people. The Scheme assists young people to maintain or develop job skills and to improve their employability.

Volunteer Youth Program (VYP)—This Program provides opportunities for young people to assist in voluntary community activity. Unemployed participants retain eligibility for Unemployment Benefit.

Community Youth Special Projects—The Commonwealth Government gives support to special projects organised by community organisations to assist long-term unemployed young people by offering employment and training related activities.

Youth Employment Support Scheme (YESS)—This Scheme is administered by the Division of Youth Affairs of the Queensland Department of Welfare Services and is open to all young people experiencing difficulties in finding or holding a job. Many of these young people are in the care of the Department of Children's Services and generally require individual attention. YESS administers a grants program to assist community organisations which provide voluntary assistance and encouragement to help young people find and retain jobs.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

The Labour Force (6201.3) (*quarterly*)

Central Office Publications

Labour Statistics (6101.0) (*annual*)

The Labour Force (6203.0) (*monthly*)

The Labour Force (6204.0) (*annual*)

Other Publications

DEPARTMENT OF EMPLOYMENT AND INDUSTRIAL RELATIONS, *Labour Force Programs and Services Guide*

DEPARTMENT OF EDUCATION AND YOUTH AFFAIRS, *A Guide to the Commonwealth Government's Programs and Services for Young People*

Chapter 13

WAGES AND INDUSTRIAL CONDITIONS

1 INTRODUCTION

This chapter presents figures and comment in a generally descriptive sense on industrial arbitration and trade unions; minimum and total wage concepts and decisions; wage indexation; hours and working conditions; surveys of weekly earnings and hours; and workers' compensation insurance for industrial accidents.

2 INDUSTRIAL ARBITRATION AND TRADE UNIONS

Both Federal and State industrial authorities enter into the field of industrial regulation in Queensland. Broadly, Federal tribunals have jurisdiction over industrial matters which extend beyond the boundaries of any one State and over all matters affecting employees of the Commonwealth Government or any of its authorities. The Federal tribunals are superior within their jurisdiction but Federal awards are more limited in their application in Queensland than in most other States. At the last survey in 1976 about 25 per cent of Queensland employees worked under Federal awards, 67 per cent under State, and 8 per cent were not under any award.

Federal Industrial Authorities

The Commonwealth Parliament is empowered, under Section 51 of the Constitution, to make laws with respect to 'conciliation and arbitration for the prevention or settlement of industrial disputes extending beyond the limits of any one State'.

The *Conciliation and Arbitration Act* 1904 provides the authority under which the Federal industrial tribunals operate. Judicial functions arising under this Act are exercised by the Industrial Division of the Federal Court of Australia while the conciliation and arbitration functions are carried out by the Conciliation and Arbitration Commission.

The Commission is empowered to take steps for the prompt prevention or settlement of an industrial dispute by conciliation or, if necessary, arbitration. It may exercise its powers at its own discretion or on the application of a party. Commissioners may be assigned to deal with disputes relating to particular industries or to deal with a particular dispute. The Commission conducts hearings in all States.

State Industrial Authorities

The Industrial Court of Queensland was established in 1917 and was the sole industrial tribunal in this State until 1961. (The constitution and functions of the Court were described in the 1960 and earlier issues of the *Year Book*.) Current legislation, the *Industrial Conciliation and Arbitration Act* 1961–1983 provides for an Industrial Conciliation and Arbitration Commission to carry out most of the arbitral functions of the Industrial Court, as previously constituted. The Industrial Court, itself, is preserved but with altered functions and structure. It is now largely judicial in character.

The Industrial Court has, as President, a judge of the Supreme Court who, sitting alone, constitutes the Court, excepting in those cases where jurisdiction is conferred on the Full Industrial Court. The Full Court consists of the President and two Commissioners of the Industrial Conciliation and Arbitration Commission.

The Industrial Conciliation and Arbitration Commission consists of not more than six members. A Commissioner may sit alone or as a member of the Full Bench of the Commission which is constituted by not less than three members of the Commission. Any question before the Full Bench may be decided by a majority. The Commission may delegate to Industrial Magistrates, or to the Chief Industrial Inspector, the formulation of details regarding the application of its decisions. All Stipendiary Magistrates are deemed to be also Industrial Magistrates; and Clerks of the Court can be appointed to act as Industrial Magistrates.

QUEENSLAND INDUSTRIAL COURT AND INDUSTRIAL COMMISSION
(Source: Queensland Industrial Registrar's Office)

Nature of business	1977	1978	1979	1980	1981	1982
Applications for						
New awards, variations, rescissions, interpretations (a)	505	441	621	851	781	963
Compulsory conferences and references to disputes	189	203	196	195	261	254
Exemptions from long service leave provisions	—	3	2	—	—	1
Injunctions and restraint orders	—	3	—	—	—	8
Miscellaneous, including deregistrations, apprentices, reinstatements, standdown orders, etc.	67	72	58	13	29	36
Appeals to Industrial Court from decisions of						
Industrial Commission	5	6	8	3	8	6
Industrial Registrar	—	2	2	—	—	1
Industrial Magistrates under						
Workers' Compensation Acts	4	4	7	5	7	7
Other acts (b)	15	25	14	8	6	8
Total	785	759	908	1,075	1,092	1,284

(a) Including general rulings and orders on trading hours. Minors Acts.

(b) Industrial Arbitration, Workers' Accommodation, and Apprentices and

Unions Registered in Queensland

In order that they may be represented in claims before the State Industrial Court and Commission, unions both of employers and employees must be registered under the *Industrial Conciliation and Arbitration Act 1961–1983*.

EMPLOYERS' UNIONS REGISTERED IN QUEENSLAND
(Source: Queensland Industrial Registrar's Office)

Name of union	Membership in Queensland at 31 December					
	1977	1978	1979	1980	1981	1982
Australian Sugar Producers' Association ..	4,874	5,025	4,878	5,102	5,106	5,057
Graziers' Association of Central and Northern Queensland	1,225	1,177	1,095	1,073	752	734
Graziers' Association of South Eastern Queensland ..	1,170	1,141	1,320	1,170	1,040	1,006
Queensland Branch, Australian Medical Association ..	1,940	2,024	2,160	2,317	2,475	2,539
Queensland Cane Growers' Association	6,557	6,479	6,384	6,296	6,241	6,140
Queensland Confederation of Industry	2,277	2,280	2,301	2,257	2,376	2,442
Queensland Master Builders' Association	922	1,475	1,572	1,658	1,948	2,077
Queensland Motor Industry Association	1,862	1,646	1,752	1,432	1,561	1,697
Queensland Retail Traders and Shopkeepers Association (Union of Employers)	3,022	2,683	2,641	2,327	2,395	2,394
United Graziers' Association of Queensland	3,415	3,450	3,654	3,167	3,007	2,836
Other unions	8,978	8,692	8,700	8,899	9,953	9,695
Total (a)	36,242	36,072	36,457	35,698	36,854	36,617

(a) Employers' unions numbered 41 in 1977, 39 in 1978, 39 in 1979, 37 in 1980, 39 in 1981, and 38 in 1982.

Most unions of employees are registered with the State Industrial Conciliation and Arbitration Commission. The exceptions are those unions all of whose members are covered by awards of the Commonwealth Conciliation and Arbitration Commission.

EMPLOYEES' UNIONS REGISTERED IN QUEENSLAND
(Source: Queensland Industrial Registrar's Office)

Name of union	Membership in Queensland at 31 December					
	1977	1978	1979	1980	1981	1982
Actors, Entertainers and Announcers Equity (Q.) ..	932	824	1,003	1,291	1,516	2,607
Amalgamated Metals Foundry and Shipwrights' (Q.)	20,777	21,828	21,320	21,856	21,660	23,697
Amalgamated Society of Carpenters, Joiners, Bricklayers and Plasterers (Q.)	7,078	5,869	5,693	5,432	5,445	6,790
Association of Architects, Engineers, Surveyors, and Draughtsmen of Australia (Q.)	1,680	1,638	1,636	1,692	1,826	765
Australasian Meat Industry (Q.)	10,543	13,447	12,796	12,096	10,564	11,844
Australian Bank Employees' (Q.)	7,730	7,949	8,244	8,787	9,564	9,865
Australian Building Construction Employees and Builders' Labourers' Federation (Q.)	1,660	1,569	1,599	2,161	3,002	5,630
Australian Federated Union of Locomotive Engine- men (Q.)	2,450	2,451	2,550	2,618	2,640	2,710
Australian Railways (Q.)	8,117	8,322	8,210	8,424	9,060	10,500
Australian Tramway and Motor Omnibus Employees' (Brisbane)	900	840	840	840	840	840
Australian Workers' (Q.)	50,838	49,124	47,367	48,536	49,217	52,753
Bacon Factories'	1,807	1,600	1,739	1,913	1,625	1,547
Clothing and Allied Trades (Q.)	2,140	2,167	2,209	1,936	2,047	2,073
Electrical Trades (Q.)	9,846	9,714	9,654	9,943	10,545	10,974
Federated Clerks' (C. and S.Q.)	20,731	19,055	19,457	20,059	20,062	19,798
Federated Clerks' (N.Q.)	4,317	4,195	4,182	4,003	4,019	3,852
Federated Engine Drivers' and Firemen's (Q.)	9,012	9,454	9,282	9,625	9,278	9,279
Federated Furnishing Trade Society (Q.)	820	815	800	850	830	800
Federated Ironworkers' (Q.)	4,539	4,859	4,704	5,886	7,115	7,050
Federated Liquor and Allied Industries (Q.)	11,000	13,300	10,000	13,400	14,452	14,406
Federated Miscellaneous Workers' (Q.) (a)	18,255	18,296	18,211	18,700	21,217	20,425
Federated Storemen and Packers' (Q.)	11,106	11,050	8,749	9,109	9,708	9,111
Hospital Employees'	2,379	2,362	2,418	2,438	2,545	2,599
Municipal Officers' (Q.)	5,714	5,870	6,300	6,088	6,450	6,877
Operative Painters' and Decorators' (Q.)	3,587	3,332	3,712	3,536	3,098	3,196
Plumbers' and Gasfitters' (Q.)	2,215	2,283	2,302	2,523	2,715	3,093
Printing and Kindred Industries (Q.)	4,796	4,993	4,938	4,907	5,261	5,469
Professional Engineers of Australia (Q.)	1,711	1,697	1,711	1,733	1,781	1,930
Musicians of Australia (Brisbane)	1,036	1,015	1,114	1,025	1,298	1,153
Queensland Colliery	2,422	2,434	2,569	2,716	3,016	3,173
Queensland Nurses'	10,926	10,772	12,112	12,848	11,535	13,087
Queensland Police	3,753	3,958	4,044	4,256	4,337	4,457
Queensland Professional Officers'	9,284	9,428	10,252	10,340	10,905	11,158
Queensland Railway Maintenance	2,517	2,613	2,610	2,570	2,517	2,464
Queensland Railway Station Officers'	1,076	1,021	956	1,007	963	849
Queensland Railway Traffic	2,720	2,499	2,462	1,650	1,706	1,287
Queensland Shop Assistants'	14,157	15,220	17,344	21,593	24,803	23,467
Queensland State Service	17,777	18,368	18,840	19,313	19,575	20,018
Queensland Teachers'	19,281	20,552	22,143	20,579	20,828	21,430
Qld Association of Teachers in Independent Schools	2,026	2,369	2,529	2,740	2,913	3,004
Railway Salaried Officers'	1,123	1,106	1,161	1,248	1,307	1,907
Transport Workers' (Q.)	18,454	17,304	16,678	16,287	16,419	14,273
Vehicle Builders' Federation (Q.)	3,579	3,368	3,569	3,550	3,801	3,521
Other unions	8,649	8,579	9,037	9,275	10,008	9,483
Total (b)	345,460	349,509	349,046	361,379	374,013	385,211

(a) Federated Miscellaneous Workers', Foodstuffs and Allied Industries, and the Leather and Allied Trades Unions amalgamated in 1977.

(b) Unions numbered 74 in 1977, 73 in 1978, 75 in 1979, 73 in 1980, 74 in 1981, and 71 in 1982.

The next table shows further details of trade union (employee) membership in Queensland. The figures include, in addition to membership of unions registered in Queensland, members covered by Federal industrial arbitration legislation and other members of unions as defined in the ABS publication *Trade Union Statistics* (Catalogue No. 6323.0), and are therefore in excess of the numbers shown in the previous table.

EMPLOYEE (TRADE) UNIONS, QUEENSLAND

At 31 December	Separate unions	Membership			Proportion of civilian employees (a)		
		Males	Females	Persons	Males	Females	Persons
	No.	'000	'000	'000	%	%	%
1977	137	268.6	119.8	388.4	59	49	55
1978	138	265.3	118.3	383.6	58	48	54
1979	139	268.6	125.2	393.8	57	48	54
1980	137	276.0	132.1	408.1	57	47	54
1981	138	285.6	135.4	421.0	58	47	54
1982	142	296.0	142.7	438.8	59	49	55

(a) Until 1979 based on estimates from Civilian Employees series and from 1980 based on Labour Force estimates.

Industrial Disputes

The next two tables refer to industrial disputes involving stoppages of work of 10 man-days or more. Workers involved indirectly are those who were out of work because of stoppages at their places of employment, but who themselves were not parties to the disputes.

INDUSTRIAL DISPUTES (INVOLVING STOPPAGE OF WORK), QUEENSLAND

Year	Disputes	Workers involved			Working days lost	Total estimated loss of wages
		Directly	Indirectly	Total		
	No.	'000	'000	'000	'000	\$'000
1977	278	108.5	9.5	118.0	240.8	8,870
1978	231	190.9	4.9	195.8	360.3	14,601
1979	194	252.2	3.1	255.3	467.9	17,688
1980	253	134.1	2.1	136.2	618.7	32,393
1981	334	109.3	4.3	113.6	465.8	27,490
1982	245	163.4	2.5	165.9	509.8	29,777

The next table shows industrial disputes according to main industry groups.

INDUSTRIAL DISPUTES: INDUSTRY GROUPS, QUEENSLAND, 1982

Industry group	Disputes	Workers involved			Working days lost	Total estimated loss of wages
		Directly	Indirectly	Total		
	No.	'000	'000	'000	'000	\$'000
Coal mining	32	15.5	—	15.5	73.7	4,850
Other mining	24	9.4	—	9.4	18.2	1,023
Metal products, machinery, and equipment	6	13.0	—	13.0	18.5	1,006
Food, beverages, and tobacco	38	28.2	1.0	29.3	51.1	2,989
Other manufacturing	7	4.2	—	4.2	13.3	767
Construction	69	27.9	0.2	28.1	66.3	4,901
Railway and air transport	24	23.4	—	23.4	193.9	10,040
Stevedoring services	13	2.5	1.3	3.8	5.6	306
Other transport, storage, and communication	10	13.2	—	13.2	23.9	1,307
Other industries (a)	22	26.0	—	26.0	45.3	2,589
Total	245	163.4	2.5	165.9	509.8	29,777

(a) Including agriculture, finance and property, wholesale and retail trade, public authority (n.e.i.), community and business services, and amusement, hotels, personal service, etc.

3 WAGES

Commonwealth Basic Wage

The Commonwealth basic wage was abolished by the Commonwealth Conciliation and Arbitration Commission on 5 June 1967 when the concept of a 'total' wage was adopted. For a detailed account of the basic wage see the 1970 and earlier issues of the *Year Book*.

State Basic Wage

A State basic wage was incorporated in all awards from 1921 to 1983. From 10 October 1983, the Industrial Commission abolished the basic wage component in awards and replaced it by the guaranteed minimum wage. In future, awards will be expressed in terms of the guaranteed minimum wage and a component for skill or work.

In addition to these components additional allowances are payable in awards for various districts within the State. These wage districts are shown on the map on page 235 and were designed partly on account of the higher 'cost of living' in these areas.

These amounts which are termed allowances or parities for each district are: South-Western District, \$1.05 per week; Mackay, \$0.90; North-Eastern, \$1.05; and North-Western, \$3.25.

Equal Pay for Male and Female Workers

Section 12 of the Queensland *Industrial Conciliation and Arbitration Act* 1961–1983 empowers the Commission to make a State award, without limiting the generality of its powers, with reference to a calling or callings whereby the same wage shall be paid to persons of either sex performing the same work, or work of a like nature and of equal value, or producing the same return of profit to their employer.

The Commonwealth Conciliation and Arbitration Commission on 19 June 1969 declared that it was prepared to implement the principle of equal pay for equal work by introducing into Federal awards and determinations the principle contained in State acts on equal pay. It also decided that no increases should be granted to adult females without an examination of the work done and that implementation of equal pay should be spread over a period.

Total Wages in Federal Awards

In June 1967, a 'total' wage concept for each award was adopted in lieu of the concept of a basic wage plus a specific margin. Since then, uniform increases have been awarded at intervals to each 'total' adult male and female award wage.

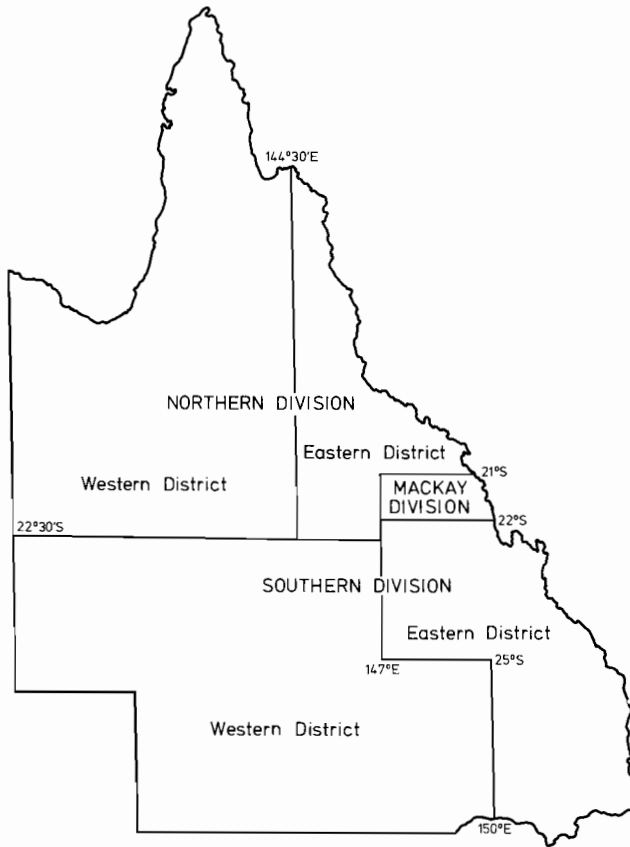
Wage Indexation

On 23 December 1982, the Australian Conciliation and Arbitration Commission imposed a pause on improvements in pay and conditions until 30 June 1983. On 28 June 1983 the pause was specifically continued until altered or rescinded by the Bench.

In May and June 1983 a number of unions made application to the Commission for a return to a centralised wage fixing system and an increase of 2.2 per cent in all awards and allowances to compensate for the movement in prices for the quarter ended March 1983. On 19 August 1983, the Australian Council of Trade Unions (A.C.T.U.), on behalf of all unions, amended the claim by adding to the March quarter increase, the June quarter increase in the Consumer Price Index of 2.1 per cent, making a total claim of 4.3 per cent.

The Confederation of Australian Industry, while supporting a return to a centralised system, opposed the increase in awards and allowances on economic grounds. The Commonwealth Government and State and Northern Territory Governments intervened in the proceedings. All supported a return to a centralised wage-fixing system. The Commonwealth Government and the Governments of Victoria, Western Australia, and South Australia

QUEENSLAND BASIC WAGE DISTRICTS



basically supported the A.C.T.U. claim. The New South Wales and Queensland Governments supported an adjustment of a flat amount in accordance with the movement in the Consumer Price Index being applied to the minimum wage. The Tasmanian Government supported only an annual review in awards and that this review should also take into account other factors such as productivity, economic capacity, inflation, and unemployment. The Northern Territory Government submitted that the pause should continue at least until the end of 1983, and if an increase were to be granted it should be minimal.

The A.C.T.U. used in support of its claim the Prices and Incomes Accord. The National Economic Summit Conference, held in April 1983, which stated that it believed that the centralised approach to wage fixation was the most equitable means by which objectives could be met, also had an important bearing on the case.

The President of the Commission convened a conference which met on 28 April, 23 May, 3 June, and 17 June 1983. This conference established a general agreement on the desirability of a return to a centralised system of wage fixation.

On 23 September 1983, the Commission handed down its decision in the National Wage Case. The Commission increased wages and salaries by 4.3 per cent (being the six monthly movement in the eight Capital Cities Consumer Price Index) with effect from 6 October 1983. The Commission also laid down a set of principles which would be used in future National Wage

Case decisions. The Commission stated that the principles were formulated on the belief that any increases coming outside a national wage increase would be a very small addition to overall labour costs.

The Commission stated in Principle 1 that it would adjust all wages and salaries every six months by an amount equal to the last two quarterly movements in the eight Capital Cities Consumer Price Index. For this purpose the Commission will sit in February and August each year following the publication of the Consumer Price Index for the December and June quarters, respectively. The form of the increase will be a uniform percentage adjustment unless the Commission can be persuaded otherwise in the light of exceptional circumstances.

Principle 2 deals with productivity increases. Claims for increases in wages and salaries or working conditions due to changes in productivity will be considered by the Commission from 1985 onward.

On 21 October 1983, the Industrial Conciliation and Arbitration Commission of Queensland increased State awards and industrial agreements by 4.3 per cent and increased the guaranteed minimum wage to \$177.70 per week. The date of operation for this decision was 10 October 1983.

Minimum Wage Rates

All adult workers under Federal and State awards are guaranteed a minimum weekly wage. For information on the introduction of minimum weekly wage rates for adult males, and the subsequent extension of the principle to adult females, see the 1977 issue of the *Year Book*.

MINIMUM WEEKLY WAGE RATES, ADULT MALES
(Source: Queensland Industrial Registrar's Office)
(\$)

Date of operation (a)	Amount	Date of operation (a)	Amount
<i>Federal awards, Brisbane</i>		<i>Queensland State awards</i>	
18 February 1978	111.70	27 February 1978	114.40
7 June 1978	113.20	12 June 1978	115.90
12 December 1978	117.70	11 December 1978	120.50
27 June 1979	121.50	27 June 1979	124.40
4 January 1980	127.00	7 January 1980	130.00
14 July 1980	132.30	14 July 1980	135.50
9 January 1981	137.20	12 January 1981	140.50
7 May 1981	142.10	11 May 1981	145.60
6 October 1983	148.20	30 November 1981	151.90
		21 June 1982	160.90
		20 December 1982	170.40
		10 October 1983	177.70

(a) Rates operative from beginning of first pay-period commencing on or after the date shown.

Award Rates of Pay Indexes

A new series of award rates of pay indexes, with a base year of 1976, was introduced in September 1982. The previous series was based on the occupation structure existing in 1954 and included only those awards relating solely or principally to wage earners. Consequently, it did not include most salary earners.

The new series has a wider coverage of award designations in keeping with the current occupation structure in which salary earners constitute a significant proportion of total employees. For a fuller description of the indexes, reference should be made to the ABS publication *Award Rates of Pay Indexes* (Catalogue No. 6312.0).

The next table shows indexes of award rates of pay, applicable to adult males and adult females, within specific groups of industries.

AWARD RATES OF PAY INDEXES (a): INDUSTRY GROUPS (b), QUEENSLAND
(Base of Each Index: June 1976 = 100.0)

Industry group	At 30 June					
	1978	1979	1980	1981	1982 <i>r</i>	1983
ADULT MALES						
Mining	116.3	124.2	132.7	153.3	172.4	178.5
Manufacturing	117.9	127.8	<i>r</i> 138.3	<i>r</i> 159.0	182.6	190.4
Electricity, gas, and water	117.2	125.7	<i>r</i> 132.4	<i>r</i> 152.0	177.3	184.7
Construction	117.8	126.8	135.0	152.2	180.6	187.2
Wholesale trade	117.9	128.3	137.0	<i>r</i> 157.7	182.2	189.7
Retail trade	118.1	127.2	135.3	<i>r</i> 156.9	179.1	192.8
Transport and storage	116.6	125.4	<i>r</i> 136.7	<i>r</i> 154.0	177.3	185.9
Communication	116.5	127.1	137.4	157.1	182.6	189.8
Finance, property and business services	122.0	130.9	142.0	158.9	178.6	189.4
Public administration and defence	116.1	124.6	<i>r</i> 132.4	149.2	176.6	186.1
Community services	118.0	126.8	136.9	155.7	177.7	184.4
Recreation, personal and other services	118.0	126.7	136.6	154.7	176.2	186.7
All industries	117.7	126.9	<i>r</i> 136.4	<i>r</i> 155.4	179.6	187.8
ADULT FEMALES						
Manufacturing	118.2	127.2	134.1	<i>r</i> 157.5	177.9	185.9
Wholesale trade	121.8	133.0	139.0	164.4	185.5	196.2
Retail trade	117.9	126.0	132.2	155.1	173.6	187.4
Communication	116.2	124.7	135.1	151.3	169.6	180.2
Finance, property and business services	117.2	125.3	134.0	155.4	174.1	184.3
Public administration and defence	117.4	126.1	135.1	152.8	169.3	176.5
Community services	116.6	125.3	<i>r</i> 136.2	154.8	175.7	184.2
All industries	117.7	126.5	<i>r</i> 135.2	155.7	174.7	183.9

(a) Weighted average minimum rate payable for a full week's work (excluding overtime) for wage and salary earners.
permanent defence forces and employees in agriculture, services to agriculture, and in private households.

(b) Excluding the

Wage Rates and Average Weekly Earnings

Estimates of average weekly earnings are obtained from quarterly surveys of earnings conducted since the September quarter 1981. Prior to September 1981, quarterly information on average earnings was obtained from employment and wages data recorded on monthly pay-roll tax returns.

The following table shows the comparison of the movement in indexes of guaranteed minimum wage, award rates of pay, and average weekly earnings for Queensland.

WEEKLY WAGE RATES AND EARNINGS INDEXES, QUEENSLAND
(Base of Each Index: June 1976 = 100.0)

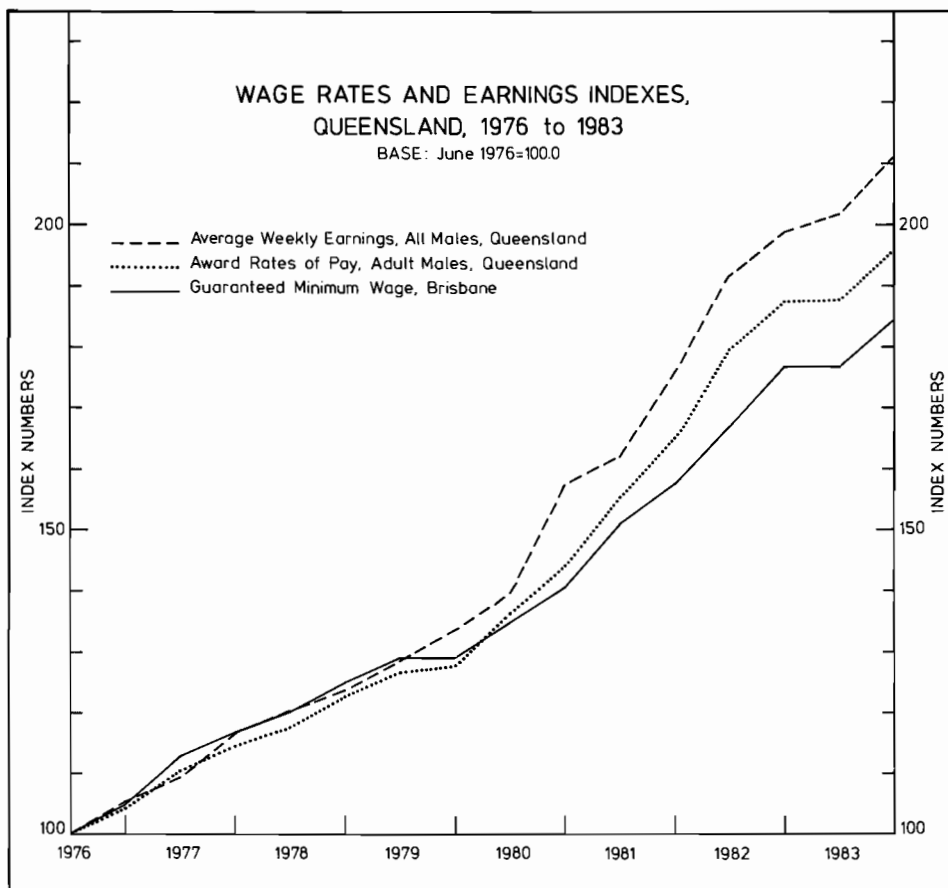
At 30 June	Adult males		All males average weekly earnings (c)
	Guaranteed minimum wage (a)	Award rates of pay (b) (c)	
1978	120.2	117.7	120.4
1979	129.0	126.9	128.6
1980	134.9	<i>r</i> 136.4	139.6
1981	151.0	<i>r</i> 155.4	162.0
1982	166.9	<i>r</i> 179.6	191.5
1983	176.8	187.8	201.8

(a) State awards in South-Eastern Division.

(b) Weighted average minimum rate payable for a full week's work (excluding overtime) for wage and salary earners.

(c) Excluding the permanent defence forces and employees in agriculture, services to agriculture, and in private households.

Movements since 1976 in the guaranteed minimum wage, award rates of pay, and average weekly earnings indexes are presented in the following diagram. For each series, actual money rates have been converted to index numbers on the common base of June 1976 = 100.



4 HOURS AND WORKING CONDITIONS

Minimum working conditions for employees are prescribed in the *Factories and Shops Act* 1960–1983 and other legislation, as well as awards and agreements of the State and Federal industrial authorities. Such legislation and awards include provisions to protect the health, welfare, and safety of workers in all occupations and in all forms of industry.

Industrial awards and agreements include, in addition to wage rates, provisions for such matters as hours of work, sick leave, annual leave, long service leave, overtime, special allowances or rates for certain conditions of work (e.g. for dangerous or specially dirty work, working in confined spaces, etc.), rest pauses, meal hours, etc.

Hours

A standard working week is prescribed in all awards and overtime rates are usually required for hours worked in excess thereof. Regulation of working time includes limitations on the 'spread' of hours where broken time is worked and outside of which extra payments are required. In some cases also, penalty rates are prescribed for work at week-ends or on public holidays even though the standard working hours have not been exceeded.

Maximum hours which may be prescribed in most State or Federal awards are 40 per week. Exceptions are made for gatekeepers employed by the Department of Main Roads or a Local

Authority, employees on coastal, river, and bay vessels, employees in agricultural industries and domestic service, and employees engaged in any other service for which a working week may be determined by the Arbitration Commission. The Commission may determine the maximum number of working hours in any day and the maximum number of working days in any week. Awards covering the building construction and electrical industries make provision for the working of a 38 hour week.

The number of hours prescribed for a full week's work (excluding overtime) differs in some instances between various occupations in each State and between the same occupations in several States.

Leave

Paid annual, long service, and sick leave are prescribed under awards of the Federal and State industrial authorities. In those cases where such leave is not prescribed, because employees are paid on an hourly basis or where work is of a seasonal or intermittent nature, compensating loadings are usually added to wage rates.

Annual Leave

For all State and most Federal awards, continuous shift workers are entitled to five weeks' and other workers to four weeks' annual leave with either a 17½ per cent loading on annual leave pay to be calculated at an award rate, or annual leave pay at an over-award rate, whichever is the greater.

Long Service Leave

Under State legislation workers are entitled to 13 weeks' leave after a period of 15 years' continuous service with the one employer. *Pro rata* leave is granted after 10 years' but less than 15 years' continuous service, providing employment is terminated for reasons other than serious misconduct. The legislation includes provision also for seasonal workers in sugar mills and meatworks, and extends also to persons in respect of whose employment no industrial award or agreement is in force. Certain awards of the State Industrial Conciliation and Arbitration Commission provide for entitlement based on continuity of service within the one industry, such as local government, fire brigade, and ambulance employees, instead of continuity of service with the one employer.

Employers may be exempted from long service leave provisions by the State Industrial Conciliation and Arbitration Commission if the terms of employment provide an entitlement to their employees which is not less favourable than those provided by legislation.

Workers employed under awards of the Commonwealth Conciliation and Arbitration Commission have similar entitlements to those provided under State legislation. *Pro rata* rights apply after 10 years' service.

Sick Leave

These entitlements vary, the minimum being eight working days per completed year. In some cases, sick leave is non-cumulative; in some cases it is cumulative for a restricted number of years; in other cases it is cumulative for an unrestricted period. For a period of employment of less than one year, *pro rata* leave is applied.

Holidays

Persons working on authorised public holidays and on any additional holidays proclaimed on a State-wide basis or applicable to a specified locality, generally receive penalty rates under their awards. In some awards, however, no penalty rates apply but the award provides for some benefit in lieu of penalty rates.

5 SURVEYS OF EARNINGS AND HOURS OF EMPLOYEES

October 1981 and November 1982 Surveys

Detailed information on employee earnings and hours was obtained from the quarterly Survey of Earnings for December quarter 1981 and 1982 which included additional questions relating to hours, junior employees, and non-managerial employees. In 1982 the survey date was changed from October to November (mid-week in the quarter) to be consistent with other survey dates for the quarterly Survey of Earnings. Prior to 1981, information for this survey was obtained from a sample of private pay-roll taxpayers and government bodies and hence the survey data from these surveys are not comparable with those from later surveys. Detailed results and explanatory notes are published in the October 1981 and November 1982 issues of the ABS publication, *Earnings and Hours of Employees* (Catalogue No. 6304.0).

AVERAGE WEEKLY EARNINGS AND HOURS: FULL-TIME NON-MANAGERIAL
PRIVATE AND GOVERNMENT EMPLOYMENT, QUEENSLAND

Particulars	October 1981	November 1982
	\$	\$
Average weekly ordinary time earnings		
Adult males	276.80	319.20
Adult females	249.70	283.80
Average weekly overtime earnings		
Adult males	31.10	29.40
Adult females	4.50	(a)
Average weekly total earnings		
Adult males	307.90	348.60
Junior males	149.80	188.20
Adult females	254.20	288.50
Junior females	139.30	163.00
	No.	No.
Average weekly total hours paid for		
Adult males	39.7	40.4
Junior males	39.2	39.3
Adult females	36.2	38.4
Junior females	38.9	38.8
Average weekly overtime hours paid for		
Adult males	2.6	2.3
Adult females	n.p.	(a)
	\$	\$
Average total hourly earnings		
Adult males	7.76	8.63
Junior males	3.82	4.79
Adult females	7.02	7.51
Junior females	3.58	4.20

(a) Subject to sampling variability too high for most practical uses.

The average weekly earnings for full-time male managerial, executive, professional, and higher supervisory staff in private employment in Queensland was \$402.90 in October 1981 and \$450.60 in November 1982.

May Surveys

Surveys of this kind were introduced to meet the growing demand for a wider range of statistics relating to the distribution and composition of earnings and hours of employees. The survey also provides information relating to the incidence of industrial awards, determinations, and collective agreements. Separate stratified random samples of private employers subject to pay-roll tax, non-government hospitals not subject to pay-roll tax, and Local Government Authorities are used, while Commonwealth and State Government bodies are fully enumerated.

The majority of employers selected are requested to supply relevant details on separate questionnaires for only a sample of their employees.

All wage and salary earners are represented except for members of the defence forces, employees in agriculture and private domestic service, waterside workers employed on a casual basis, and employees of private employers (other than hospitals) not subject to pay-roll tax.

Because of differences in scope and definition, the results of the May Surveys are not directly comparable with those of other surveys and series such as the October Survey of Earnings and Hours of Employees, and the quarterly series of Average Weekly Earnings. In the October Surveys for instance, adults include persons under 21 years of age paid at adult rates while in the May Survey such persons are included with others under 21 years of age.

The following table shows the composition of average weekly earnings and average weekly hours paid for, for full-time non-managerial employees in Queensland.

COMPOSITION OF AVERAGE WEEKLY EARNINGS AND AVERAGE WEEKLY HOURS PAID FOR:
FULL-TIME NON-MANAGERIAL EMPLOYEES, QUEENSLAND, MAY 1981

Particulars	Males		Females	
	Earnings	Hours	Earnings	Hours
	\$	No.	\$	No.
Persons aged 21 years and over				
Average weekly earnings and hours	295.20	41.1	237.50	38.4
Ordinary time				
Award or agreed base rate of pay	251.50	38.5	226.20	38.0
Payment by measured result and other pay	16.10		6.80	
Overtime	27.60	2.6	4.50	0.5
Persons aged under 21 years				
Average weekly earnings and hours	165.70	39.7	147.80	39.5
Ordinary time				
Award or agreed base rate of pay	142.20	38.3	143.20	38.9
Payment by measured result and other pay	12.80		1.10	
Overtime	10.70	1.5	3.50	0.6

The next table shows the distribution of weekly earnings for full-time adult (persons aged 21 years and over) non-managerial employees paid for a full week.

FULL-TIME ADULT (a) NON-MANAGERIAL EMPLOYEES PAID FOR A FULL WEEK:
WEEKLY EARNINGS, QUEENSLAND, MAY 1981

Weekly earnings groups	Males		Females	
	Per cent of employees	Cumulative proportion of total	Per cent of employees	Cumulative proportion of total
\$	%	%	%	%
Under 160	1.9	1.9	5.0	5.0
160 and under 170	1.8	3.7		10.9
170 and under 180	3.2	6.9	5.9	17.6
180 and under 190	3.8	10.7	6.7	26.4
190 and under 200	5.8	16.5	8.8	37.8
200 and under 210	5.5	22.0	9.0	46.8
210 and under 220	6.0	28.0	14.2	61.0
220 and under 230	5.1	33.1		72.4
230 and under 240	11.6	44.7	11.4	80.2
240 and under 260	9.4	54.1	7.8	86.7
260 and under 280	8.8	62.9	6.5	.
280 and under 300	15.2	78.1	13.4	.
300 and under 350	9.3	87.4		.
350 and under 400	12.5	.	.	.
400 and over	100.0	.	100.0	.
Total	100.0	.	100.0	.

(a) Aged 21 years and over.

6 INDUSTRIAL ACCIDENTS

Safety

Most of the legislation regarding industrial safety is administered by the Department of Employment and Industrial Affairs, although other departments hold responsibilities in certain areas. The safety regulations relating to the safety of shops, factories, and offices are not contained by any universal industrial legislation but are covered by a number of Acts, the principal Acts being the *Factories and Shops Act* 1960–1983 and the *Inspection of Machinery Act* 1951–1982. Safety regulations for other industries are mentioned in the respective sections of the *Year Book*.

Industrial Accidents

Detailed information on industrial accidents in Queensland, on a date of occurrence basis, has been compiled since 1972. Statistics relate to compensative accidents covered by the *Workers' Compensation Act* 1916–1983 and are restricted to fatal injuries, permanent disabilities, and those accidents causing an absence from work of one shift or more. Accidents involving medical expenses only are not recorded. Statistics do not include all self-employed persons who are not obliged to insure.

Details of the total number of work injuries and occupational diseases showing the number of fatal, permanent, and temporary disabilities, as well as injuries sustained on journeys to or from work or in recess periods are given in the next table.

INDUSTRIAL ACCIDENTS, QUEENSLAND

Particulars	1979–80			1980–81			1981–82		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Fatal work injuries	65	4	69	44	—	44	34	2	36
Fatal diseases	32	—	32	49	—	49	31	1	32
Permanently disabling work injuries	520	48	568	703	56	759	660	56	716
Permanently disabling diseases	186	1	187	370	5	375	465	6	471
Temporarily disabling work injuries	55,543	7,229	62,772	52,083	7,028	59,111	56,427	7,967	64,394
Temporarily disabling diseases	834	236	1,070	598	257	855	664	340	1,004
Injuries sustained on journey to or from work	1,954	708	2,662	1,993	619	2,612	2,476	852	3,328
Injuries incurred during recess periods	132	40	172	97	25	122	109	34	143

Industrial accidents giving the extent of disability and the number of days lost are shown in the next table. The information relates to work injuries only, i.e. accidents occurring in a person's hours of work, excluding occupational diseases.

WORK INJURIES BY INDUSTRY GROUPS, QUEENSLAND

Industry group	All injuries	Extent of disability			Days lost, temporary disability
		Fatal	Permanent	Temporary	
1980-81					
Agriculture, forestry, fishing, and hunting	2,359	8	57	2,294	89,192
Mining (including quarrying)	2,752	2	25	2,725	65,105
Meat products manufacturing	7,921	—	93	7,828	187,502
Other food, beverages, and tobacco manufacturing	2,340	3	30	2,307	46,184
Wood, wood products, and furniture manufacturing	2,363	1	57	2,305	48,922
Fabricated metal products manufacturing	3,122	1	31	3,090	52,655
Transport equipment manufacturing	2,596	—	24	2,572	48,737
Construction	10,617	8	134	10,475	276,231
Wholesale and retail	7,469	2	98	7,369	162,236
Transport and storage	3,666	11	49	3,606	106,542
Other industries	14,709	8	161	14,540	359,456
Total	59,914	44	759	59,111	1,442,762

WORK INJURIES BY INDUSTRY GROUPS, QUEENSLAND—*continued*

Industry group	All injuries	Extent of disability			Days lost, temporary disability
		Fatal	Permanent	Temporary	
1981-82					
Agriculture, forestry, fishing, and hunting	2,653	4	53	2,596	103,474
Mining (including quarrying)	2,897	3	32	2,862	66,746
Meat products manufacturing	8,962	—	89	8,873	183,122
Other food, beverages, and tobacco manufacturing ..	2,536	—	31	2,505	46,075
Wood, wood products, and furniture manufacturing ..	2,373	—	66	2,307	50,339
Fabricated metal products manufacturing	3,875	—	50	3,825	58,963
Transport equipment manufacturing	2,944	1	25	2,918	47,042
Construction	8,621	11	86	8,524	224,373
Wholesale and retail	7,984	4	86	7,894	159,958
Transport and storage	5,069	7	53	5,009	133,303
Other industries	17,232	6	145	17,081	386,980
Total	65,146	36	716	64,394	1,460,375

Workers' Compensation Insurance

In Queensland workers' compensation insurance is, by law, confined solely to the Workers' Compensation Board of Queensland which commenced operation on 1 July 1978. Prior to that date workers' compensation insurance was the responsibility of the State Government Insurance Office.

Under the *Workers' Compensation Act 1916-1983* all persons who work under a contract of service, except members of the Police Force and the Commonwealth Government Public Service (separately provided for under other legislation), are entitled to compensation for personal injury arising out of or in the course of employment. The term personal injury also refers to a disease which is contracted, aggravated, or accelerated in the course of employment, whether at or away from the place of employment, to which the employment was a contributing factor.

Under the Act the amount of money payable for a fatal injury of a breadwinner is \$42,390, plus the sum of \$770 in respect of each year or part of a year comprising the period commencing on the date of death of the worker and terminating on the date on which a dependent child attains the age of 16 years or, in the case of a dependent student, 21 years, but in no case shall the amount paid in respect of each dependant exceed \$3,140. For non-fatal injuries the maximum payment is \$42,390. The weekly rate of compensation payable for workers under any award or industrial agreement for the first 26 weeks of injury is the award or agreed rate. After 26 weeks the rate is the guaranteed minimum wage plus dependant allowances.

The next table gives details of operations under the Act for the last six years.

WORKERS' COMPENSATION, QUEENSLAND
(Source: The Workers' Compensation Board of Queensland)

Particulars		1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Intimated claims	No.	79,317	81,525	86,398	91,301	100,128	89,739
Claims (a)	.. \$	59,061,319	75,373,416	79,484,893	94,340,452	129,886,707	149,641,625
Premiums (b)	.. \$	74,860,376	67,176,510	81,738,536	95,934,617	123,730,588	151,309,524

(a) Payments during the year adjusted for estimated outstanding claims at beginning and end of year. which amounted to \$45,100,536 in 1982-83.

(b) After distribution of bonuses

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Industrial Accidents (6301.3) (*annual*)

Central Office Publications

Labour Statistics (6101.0) (*annual*)

Average Weekly Earnings (6302.0) (*quarterly*)

Earnings and Hours of Employees (6304.0) (*annual*)

Earnings and Hours of Employees, Distribution and Composition (6306.0) (*annual*)

Weekly Earnings of Employees (Distribution) (6310.0) (*annual*)

Award Rates of Pay Indexes (6312.0) (*monthly*)

Industrial Disputes (6322.0) (*quarterly*)

Trade Union Statistics (6323.0) (*annual*)

Chapter 14

TRANSPORT AND COMMUNICATION

1 INTRODUCTION

This chapter gives available statistics on the transport industry followed by a summary of postal, telecommunication, radio, and television service statistics.

As an integrated survey of the transport industry has not yet been carried out, the statistics available for most sections of the industry are not comprehensive. This chapter provides, however, details of sea transport and ports, broad statistics on railways, roads, road transport (limited mainly to the number of motor vehicles on the register and numbers of new motor vehicles registered in Queensland), road traffic accident statistics, and some statistics on air services.

Until a major collection of the transport industry is conducted (the first major collection within the integrated economic framework is planned for 1983–84), the only comprehensive statistics of employment in the industry are available from the Census of Population and Housing. The most recent figures, from the Population Census at 30 June 1981, show 58,000 persons engaged in the transport and storage industry (or 6.1 per cent of the total employed persons). Of these, 21,700 were engaged in road transport, 21,300 in rail transport, 5,200 in water transport, 5,600 in air transport, and the remaining 4,200 in storage and other forms of transport. In addition to persons directly employed in the industry there are those in the wholesale and retail trade employed in selling motor vehicles, accessories, petrol, and oils, as well as those engaged in the manufacture, assembly, or repair of rail and road vehicles, aircraft, or ships.

2 SEA TRANSPORT AND PORTS

Sea transport is of importance to Queensland because of the trade through the ports which principally export minerals, meat, sugar, and grain from the adjacent regions and import petroleum, iron and steel, and fertilisers in return.

Principal Ports

The Port of Brisbane is one of Queensland's major ports, having two large oil refineries with berths for large tankers, and the largest commercial dry dock in Australia, Cairncross, taking ships up to 85,000 deadweight tons. Facilities to handle containerised cargo and bulk sugar, minerals, etc. are also provided.

Following the decision to develop a deeper and more modern port at Fisherman Islands at the mouth of the Brisbane River, the Port of Brisbane Authority was set up in 1976 for the

management and control of the new port. The new wharf and container facilities, with a loading capacity of 3m tonnes a year, were officially opened in November 1981.

Stage II works for Container Terminal No. 2 were completed during 1982-83 at a cost of \$3.3m. The Coal Export Terminal also was completed during the year for a final value of \$30.4m and received its first stockpile coal in January 1983. Planning for the construction of a grain export terminal has been completed. The estimated cost of the project is \$36.5m. Basic reclamation of the site has been completed and preliminary berth dredging has started.

The river port of Maryborough is supplemented by a deep-water jetty at Urangan. Bundaberg has a deep-water port and a bulk sugar and molasses terminal. Urangan and Bundaberg have bulk oil storage installations.

Gladstone is the Queensland port which handled the largest volume of cargo during 1982-83. Exports of 13.4m tonnes (including 10.9m tonnes of coal and 1.8m tonnes of alumina) and imports of 5.2m tonnes (including 4.2m tonnes of bauxite ore) made a total of 18.6m tonnes of cargo handled through the port in 1982-83. The proposed development of new central Queensland coalfields has created a need for even more modern facilities than exist at present to handle larger quantities of coal. In May 1980 the Clinton coal loading facility was opened. Stage 1, which cost \$28m, handles coal from the Gregory and Blackwater Mines. The construction of Stockpile No. 6 has been completed, giving the facility a total storage capacity of 1.8m tonnes of coal. Contracts were awarded for the construction of Stockpile No. 7 and it was completed in November 1983. As well as coal and bauxite ore, the port is equipped to handle grain, oil, etc. in bulk.

Port Alma, near the mouth of the Fitzroy River, is the port for Rockhampton, which is 64 kilometres distant. It is a bulk oil storage terminal as well as a container terminal. The chief exports are bulk salt and bulk tallow. Meat, which was formerly the main export item, is now mainly shipped through the larger container ports of Brisbane and Sydney.

Mackay, an artificial deep-water port, has bulk sugar handling installations, bulk oil storage facilities, and a containerised general cargo terminal. Total storage capacity of the bulk sugar terminal is 727,000 tonnes, making it the largest in the world. In 1982 work was completed on the new grain export terminal consisting of four 2,700 tonne silos, rail and road receiving facilities, road outlet facility, amenities building, rail loop, and grain drier. Total expenditure for the project was \$5.6m, and the first grain sorghum shipment of 5,512 tonnes left Mackay in December 1982.

Just south of Mackay lies the port of Hay Point. The handling of coal since 1971 from the Goonyella, Peak Downs, and Saraji fields through Hay Point has increased to such an extent that it has become the leading Queensland port in terms of volume of cargo exported, with 14.2m tonnes during 1982-83. At 30 June 1983, construction of a second coal export terminal, to be known as the Dalrymple Bay Terminal, had progressed to the point where approximately 90 per cent of Stage 1 of the Terminal works had been completed. Stage 1 will have an export capacity of 15m tonnes a year of which 14.6m tonnes a year have been committed to accommodate the exports of coal from the mines at German Creek, Oaky Creek, Riverside, and Blair Athol. Total cost of the facility is estimated at \$250m.

Bowen, on the shores of Port Denison, is a port principally engaged in exporting coal to Japan.

At 30 June 1983, \$104.7m had been spent on the construction of the Abbot Point Coal Facility (north of Bowen) which will export the coal from the Newlands and Collinsville mines. Stage 1 of the facility will have a throughput capacity of 6.5m tonnes a year and will cost approximately \$190m. Additional stages of the facility will increase the capacity to 10m, then 24m tonnes a year when required.

Townsville is a major Queensland port situated on Cleveland Bay. Ten berths suitable for overseas ships are provided inside two breakwaters. All berths are accessible by road and three are fully integrated with the State railway system. Specialised bulk handling installations are available for sugar, zinc concentrates, and oil; and a roll-on-roll-off wharf terminal has been constructed for container and vehicular cargo. A diverse range of cargoes is handled and exports include sugar, lead, refined copper, molasses, and meat.

The ports of Lucinda and Mourilyan are equipped with bulk sugar handling plants and serve the sugar industry in the Ingham and Innisfail districts.

Cairns, on Trinity Bay, has facilities for the handling of bulk sugar, bulk molasses, and bulk tallow and a containerised general cargo terminal. Other facilities include a 51 berth complex for commercial fishing vessels, a commercially-operated dry dock in Smiths Creek, and extensive facilities for small craft. The 1982–83 year saw the completion of the roll-on-roll-off container facility costing \$1.9m and the completion of an extension to No. 1 Wharf in Smiths Creek.

Weipa, on the Gulf of Carpentaria, is the port for locally-mined bauxite. Cargo handled during 1982–83 totalled 6.7m tonnes. Smaller ports include Thursday Island, the Gulf ports of Normanton, Burketown, and Karumba, and Cooktown, Quintell Beach (formerly Portland Roads), and Cape Flattery on the north-east coast.

The State Government subsidises a general cargo shipping service between ports in the Gulf of Carpentaria and on the east coast.

Port Control

The ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton, and Townsville are administered by Harbour Boards or port authorities with members representing the towns and districts served by the ports. All the other ports, excluding the Port of Brisbane (administered by the Port of Brisbane Authority), are controlled by the Harbours Corporation, Department of Harbours and Marine, which also supervises the engineering activities of the other seven ports. Many of the Brisbane wharves are owned by private shipping interests.

The Gold Coast Waterways Authority was constituted by Act of Parliament in 1979. The Authority has the powers and functions of a Harbour Board and has assumed control of the harbour functions of the Gold Coast waterways, previously controlled by the Port of Brisbane Authority and the Harbours Corporation of Queensland. The Authority's first task was to take over existing planning for the trained river entrance of the Nerang River, and to present a strategic plan for long-term development of the Southport Spit and the adjacent Broadwater to provide increased small craft facilities.

Port of Brisbane Finances

The volume of trade through the Port of Brisbane was 11,977,000 revenue tonnes for the 1982–83 financial year. This represented a decrease of 4.6 per cent on that of the previous year. Revenue collected from harbour dues, the Authority's main source of income, was \$11,551,192. Total income for the period was \$24,453,194, while expenditure amounted to \$21,942,910, resulting in a net profit from operations of \$2,510,284. General development costs for establishing the new port at Fisherman Islands were \$10,414,167.

The total number of private vessels to make use of the Cairncross Dockyard decreased from 14 in 1981–82 to 13 in 1982–83. Income from dockyard activities amounted to \$6,088,666, while expenditure totalled \$6,970,433.

Small Craft Facilities

The Department of Harbours and Marine is responsible for the development of small craft facilities and has established a fund for this purpose. During 1982–83 expenditure from this fund

on such works as maintenance and construction of boat harbours, jetties, boat ramps, lights, beacons, etc. amounted to \$2,044,504.

Cargo Discharged and Shipped

The next table shows overseas cargo movements at Queensland ports.

QUEENSLAND PORTS: OVERSEAS CARGO, 1981-82
(^{'000})

Port	Cargo loaded		Cargo discharged	
	Revenue tonnes	Gross wt tonnes	Revenue tonnes	Gross wt tonnes
Brisbane	2,547	2,494	1,962	1,329
Bundaberg	174	174	—	—
Gladstone	11,200	11,200	441	434
Rockhampton	25	25	19	19
Hay Point	14,207	14,207	—	—
Mackay	882	882	98	98
Bowen	159	159	—	—
Townsville	1,097	1,096	392	324
Lucinda	243	243	—	—
Innisfail (Mourilyan)	337	337	—	—
Cairns	379	379	29	29
Cape Flattery	267	267	—	—
Weipa	4,323	4,323	53	53
Karumba	1	1	20	20
Thursday Island	114	113	4	4
Total	35,954	35,900	3,019	2,310

Cargo statistics as shown in the tables are recorded in both 'revenue' tonnes and in 'gross weight' tonnes.

- (i) A revenue tonne is the unit of quantity used predominantly in the shipping industry. It is the basis on which freight is charged and is obtained by adding mass (tonnes weight) and volume (cubic metres) units.
- (ii) Gross weight is the total weight of cargo, excluding the weight of containers, irrespective of the basis on which freight is charged.

The next table shows cargo loaded for overseas from Queensland and cargo from overseas discharged at Queensland ports by broad trade area groups.

SHIPPING CARGO: DISCHARGED AND SHIPPED OVERSEAS BY MAJOR TRADE AREAS, QUEENSLAND, 1981-82

Cargo	North America (a)	South America	Europe	Africa	Asia	Other (b)	Total
Loaded							
Revenue tonnes '000	2,473	77	8,083	45	25,110	166	35,954
Gross weight tonnes '000	2,468	77	8,081	44	25,093	137	35,900
Discharged							
Revenue tonnes '000	816	1	102	6	1,921	174	3,019
Gross weight tonnes '000	679	—	68	5	1,394	164	2,310

(a) Including Hawaii.

(b) Including Papua New Guinea, Pacific Ocean, Indian Ocean, and Antarctica.

3 RAILWAYS

For a detailed account of the early history of the Queensland railways, the reader is referred to the 1970 and earlier issues of the *Year Book* and to a special article in Chapter 4, Government, in this issue.

Queensland's first railway line was opened in 1865. It extended for 35 kilometres from Ipswich to Bigge's Camp (now known as Grandchester). From its start the railway was a government-owned 1,067 millimetre gauge system and has remained so ever since.

The opening of the Ipswich-Bigge's Camp section touched off what has been described as an epidemic of railway fever throughout the Colony and four more sections of line between Ipswich and Toowoomba had been constructed by the end of 1867.

The first section of what was then known as the Great Northern Railway, between Rockhampton and Westwood, a distance of 53 kilometres, was completed in 1867. The Ipswich-Brisbane section was opened as far as Oxley Point in February 1875 and the first passenger train left Brisbane for Ipswich in June that year. The first section of the line west from Townsville, 137 kilometres to Charters Towers, was opened in 1882.

In 1921, the planned North-South rail link was opened as far as Mackay and in 1924 work was completed on the system between Cairns and Brisbane to provide Australia's longest unbroken railway at that time.

Work on the Queensland section of the interstate uniform 1,435 millimetre gauge line from South Brisbane was commenced in 1926. The South Brisbane to Kyogle (N.S.W.) link was opened in 1930.

At 30 June 1983, the Queensland Railways system consisted of 9,979 kilometres of line, of which 9,868 kilometres were 1,067 millimetre gauge and 111 kilometres were 1,435 millimetre gauge.

Railway Planning and Development

The greater part of planning and development effort during the year was concentrated on coal projects. Four major coal developments are scheduled to commence railings during 1983-84, while test railings for a fifth project are also expected to take place during that year. Projects in which there was a heavy planning and development involvement, and which commenced production and railings in 1982-83, included German Creek, Oaky Creek, Collinsville, West Moreton, and Boundary Hill.

The Queensland Government has given authorisation to proceed with the electrification of the Blackwater to Gladstone coal railway line and then the Goonyella coal railway system. The estimated cost of the work in June 1982 prices is \$269m for the Blackwater-Gladstone line and \$315m for the Goonyella system. Detailed design of the Blackwater to Gladstone system was undertaken in 1981. Tenders for all major elements of the scheme were called in 1983 and contracts will be awarded in 1984.

Brisbane Suburban System

In the Brisbane area, major improvements are in progress or are planned for the suburban system. The first of these to be completed was the cross-river rail link between South Brisbane and Roma Street Stations which was opened on 18 November 1978.

Work continued on the Brisbane suburban electrification program. Expenditure on works associated with this program during 1982-83 comprised \$45.4m from the Urban Public Transport Fund and \$1.4m from Loan Funds.

Electric services commenced on the Darra to Ferny Grove section (Stage 1) in November 1979, on the Darra to Ipswich section (Stage 2) in September 1980, on the Roma Street to Kingston and Mayne to Shorncliffe sections (Stage 3) in September 1982, and on the Northgate to Petrie and Park Road to Thorneside sections (Stage 4) in April and October 1983, respectively.

Except for the Pinkenba line which caters mainly for freight traffic, the completion of the Park Road to Thorneside section means that all of the Brisbane suburban system is now electrified. This stage was reached seven months ahead of schedule.

Construction is now under way to extend electric train passenger services to Caboolture in the north and Beenleigh in the south. Detailed engineering surveys are being carried out for the extension of electric railways to Cleveland and from Beenleigh to the Gold Coast. Land acquisition is in progress for the electric rail extension from Petrie to Redcliffe.

Rolling Stock

The fleet of locomotives in service at 30 June 1983 totalled 604; an increase of 31 when compared with the number in the previous year. A contract has been let for the supply of a further 33 locomotives. Wagons on the books of the Department at the end of the financial year totalled 24,685, an increase of 565 over the total of the previous year. Wagons of various types, principally bulk coal wagons, numbering 658 are on order.

Deliveries of 40 three-car electric multiple units were made, and these units placed in service at the end of the financial year. A further 36 units are on order.

QUEENSLAND RAILWAYS: ROLLING STOCK
(Source: Queensland Railway Department)

At 30 June	Diesel locomotives				Cars	Rail motors, trailers, etc.	Brake vans	Wagons
	Electric	Hydraulic	Mechanical	Total				
1978	446	73	4	523	922	68	155	23,137
1979	455	73	4	532	939	68	171	22,957
1980	474	73	4	551	955	68	173	23,413
1981	482	73	4	559	962	68	186	23,747
1982	496	73	4	573	987	68	192	24,120
1983	527	73	4	604	(a) 1,015	68	189	24,685

(a) Including electric multiple units totalling 120 cars (40 × 3).

Summary of Operations

The following details of traffic include the operations of the South Brisbane-Border (Uniform Gauge) Railway. The Queensland section of the Uniform Gauge Railway to Sydney is operated by the New South Wales Railways Commissioner.

Coaching traffic, which includes passenger, parcel, mail, and miscellaneous traffic, provided 5.7 per cent of the total earnings in 1982-83. Passenger traffic earnings alone provided 4.8 per cent.

Average earnings per passenger train-kilometre in 1982-83 were \$3.36 for suburban services and \$2.78 for country services. Passengers on season and workers' weekly tickets represented 62 per cent of metropolitan travellers and 42 per cent of non-metropolitan travellers in 1982-83. Overall passenger patronage again showed an increase; an improvement of 1.5 per cent over that in 1981-82.

Goods traffic provided 92 per cent of the total earnings in 1982-83.

Since the introduction of diesel-electric locomotives, the average gross load of goods and livestock trains on the 1,067 millimetre gauge lines has risen from 317 tonnes in 1953-54 to 1,134 tonnes in 1982-83.

Railings of livestock during 1982-83 decreased by 78,914 tonnes when compared with that of the previous year, with a consequent decrease in revenue of \$4,655,025. Wool carried in 1982-83 was 17,993 tonnes which was 7,125 tonnes less than in the previous year.

Coal and coke carried in 1982-83 totalled 32,129,853 tonnes which was 2,063,309 tonnes more than in 1981-82.

The next table shows details of the earnings, working expenses, and traffic operations of the Queensland railways, including the operations of the South Brisbane-Border (Uniform Gauge) Railway.

QUEENSLAND RAILWAYS: SUMMARY OF OPERATIONS
(Source: Queensland Railway Department)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Lines open km	9,787	9,789	9,904	9,932	9,969	9,979
Traffic train-kilometres '000 km	30,199	32,100	32,589	31,282	32,696	30,885
Train-kilometres per kilometre open km	3,086	3,279	3,291	3,150	3,280	3,095
Total earnings \$'000	273,551	310,418	352,700	416,796	520,265	549,859
Earnings per train-kilometre \$	9.06	9.67	10.82	13.32	15.91	17.80
Total working expenses (a) \$'000	337,762	365,070	422,503	486,126	588,051	664,548
Expenses per train-kilometre \$	11.18	11.37	12.96	15.54	17.99	21.52
Net revenue \$'000	-64,211	-54,652	-69,803	-69,331	-67,786	-114,689
Working expenses as % of earnings %	123.5	117.6	119.8	116.6	113.0	120.9
Coaching traffic						
Train-kilometres '000 km	7,261	7,632	8,203	8,262	8,498	8,599
Country '000 km	3,956	3,939	4,087	4,097	4,260	4,133
Suburban (b) '000 km	3,305	3,693	4,116	4,165	4,238	4,466
Passengers carried '000	29,231	27,275	29,482	31,873	34,237	34,749
Country '000	1,705	1,425	1,476	1,544	1,645	1,614
Suburban (b) '000	27,526	25,850	28,006	30,330	32,592	33,135
Earnings collected \$'000	16,979	18,562	21,237	24,292	27,855	31,204
Passengers \$'000	12,639	13,807	15,977	18,595	22,947	26,486
Country \$'000	6,069	6,444	7,498	8,514	10,298	11,499
Suburban (b) \$'000	6,570	7,364	8,479	10,080	12,649	14,987
Parcels, mails, etc. \$'000	4,340	4,755	5,260	5,697	4,908	4,718
Goods traffic (c)						
Train-kilometres '000 km	22,938	24,469	24,386	23,020	24,198	22,285
Freight carried '000 tonnes	34,155	36,542	38,440	41,504	43,659	43,706
Minerals (including coal) '000 tonnes	27,011	28,300	30,077	34,098	34,807	36,451
Agricultural produce '000 tonnes	3,019	3,580	3,849	3,113	4,092	3,188
Other goods '000 tonnes	3,203	3,449	3,670	3,674	4,106	3,492
Livestock '000 tonnes	921	1,212	844	619	655	577
Earnings collected \$'000	249,690	284,699	324,170	383,695	481,193	508,223
Minerals (including coal) \$'000	144,801	153,051	190,382	257,828	324,317	369,954
Agricultural produce \$'000	24,923	34,435	38,752	28,668	40,529	33,024
Other goods \$'000	59,150	66,661	73,898	81,381	96,792	90,345
Livestock \$'000	20,816	30,551	21,139	15,818	19,555	14,900
Average length of haul (d) km	302	296	295	286	298	299
Average gross load of goods trains (d) .. tonnes	936	935	974	1,054	1,095	1,134
Rents, refreshment rooms, etc. \$'000	6,881	7,157	7,293	8,809	11,217	10,432

(a) Excluding, from 1978-79, interest, redemption, and sinking fund charges on Uniform Gauge Railway. (b) Metropolitan District only. (c) Excluding departmental traffic. (d) Excluding the Normanton Railway; and the Innisfail and Mourilyan Tramways.

Divisional Operations

The Queensland railway system is divided into the four Divisions of South Eastern, South Western, Central, and Northern for administrative purposes. Details of divisional operations are given in the next table. Figures for the South Brisbane-Border (Uniform Gauge) Railway are included with those for the South Eastern Division.

During 1982-83 net expenditure on loan account (exclusive of South Brisbane-Border Railway) totalled \$30,432,062. Of this, \$10,938,120 was general expenditure on surveys, rolling stock, and depreciation. Of the remainder, \$13,996,017 or 71.8 per cent was expended in the

South Eastern Division, \$968,408 (5.0 per cent) in the South Western Division, \$3,228,838 (16.6 per cent) in the Central Division, and \$1,300,679 (6.7 per cent) in the Northern Division.

QUEENSLAND RAILWAYS: DIVISIONAL OPERATIONS, 1982-83
(Source: Queensland Railway Department)

Particulars	South Eastern Division (a)	South Western Division	Central Division	Northern Division	Total
Lines open km	1,541	2,182	3,214	3,042	9,979
Traffic train-kilometres .. '000 km	11,453	2,698	10,068	6,666	30,885
Train-kilometres per kilometre open km	7,432	1,236	3,133	2,191	3,095
Total earnings allotted \$'000	72,462	21,064	342,275	114,058	549,859
Earnings per train-kilometre \$	6.33	7.81	34.00	17.11	17.80
Total working expenses \$'000	(b) 226,574	66,637	221,941	149,395	664,548
Expenses per train-kilometre \$	19.78	24.70	22.04	22.41	21.52
Net revenue \$'000	-154,112	-45,573	120,334	-35,337	-114,689
Working expenses as % of earnings %	312.68	316.35	64.84	130.98	120.86
Coaching traffic (c)					
Passengers carried '000	34,308	34	95	312	34,749
Earnings collected \$'000	26,233	541	1,544	2,886	31,204
Passengers \$'000	21,336	440	1,628	3,081	26,486
Parcels, mails, etc. \$'000	4,896	101	-84	-195	4,718
Goods traffic (c)					
Freight carried '000 tonnes	3,641	1,194	32,676	6,195	43,706
Minerals (including coal) '000 tonnes	721	4	31,222	4,504	36,451
Agricultural produce '000 tonnes	185	1,044	858	1,101	3,188
Other goods '000 tonnes	2,696	64	401	331	3,492
Livestock '000 tonnes	39	83	196	259	577
Earnings collected \$'000	72,816	17,315	312,720	105,371	508,223
Minerals (including coal) \$'000	7,692	98	288,883	73,281	369,954
Agricultural produce \$'000	3,499	12,882	6,889	9,754	33,024
Other goods \$'000	60,812	2,292	11,985	15,256	90,345
Livestock \$'000	813	2,043	4,963	7,081	14,900
Rents, refreshment rooms, etc. \$'000	7,543	303	1,469	1,117	10,432

(a) Including Uniform Gauge (1,435 mm) Railway details.

(b) Excluding interest, redemption, and sinking fund charges on Uniform Gauge Railway.

(c) Dissected into Divisions according to the stations at which carriage was originated. Departmental traffic is excluded.

Private Railways

At 30 June 1983, there was 6 kilometres of private railway open to the public for general passenger and goods traffic. This line, the same gauge as the State railway system (1,067 millimetres), is operated by Bowen Consolidated Mines.

In addition there was a large number of private tramways owned by sugar mills to carry sugar cane to the mills, but these were not open to public traffic.

4 URBAN PASSENGER SERVICES

Brisbane

Public transport in Brisbane is provided by the Brisbane City Council, private bus operators, and, as covered in Section 3 of this chapter, the government railways. In 1969 the Brisbane City Council replaced the tramway and trolley bus system with a motor bus service. At 30 June 1983 the City Council operated 564 motor buses over 676 route kilometres, with a staff of 1,481 persons. The City Council motor buses carried 44,555,876 passengers in 1982-83.

Other Cities

In other Cities and Towns of Queensland passenger transport services are provided by motor buses operated either privately or as municipal services. The private bus industry in Queensland continues to receive financial assistance (\$3,174,994 in 1982-83) from the State Government under the *Urban Passenger Service Proprietors Assistance Act 1975-1978*.

Metropolitan Transit Authority

The Metropolitan Transit Authority was established by the *Metropolitan Transit Authority Act 1976-1979*. The Authority took over and continued the work of The Metropolitan Transit Project Board.

The function of the Authority is to provide a properly integrated and efficient system of public passenger transport for the City of Brisbane and adjacent areas and to that end the Authority is to formulate appropriate programs for submission to the Minister, and subject to approval by the Governor in Council is to implement approved programs, co-ordinate and assist public passenger transport services by approved means, enter into agreements directed to the improvement or expansion of public passenger transport services, and, if so approved, take over and operate such services.

The Authority has been given a comprehensive list of powers to enable it to discharge its function. These include the power to operate, by itself or in conjunction with another person, a public passenger transport service by land, water, or air, including a service by air-cushion vehicle.

A Planning Advisory Committee, consisting of the Chairman of the Authority (or acting executive member), a person nominated by or on behalf of the Commonwealth, the Commissioner for Transport, the Commissioner for Railways, and the Commissioner for Main Roads was established to advise the Authority.

The major project undertaken by the Authority during 1982-83 was the preparation of the Development Plan 1984-1989. The plan identifies public transport needs for the period 1984 to 1989 and is the successor to the first Development Plan. Other activities included the continued expansion of park and ride facilities, the completion of the first car/bus interchange at Windsor, the construction of new ferry passenger shelters, and the conduct of various transportation studies. The Authority also played a key role in the co-ordination of public transport for the Commonwealth Games, held between 30 September and 9 October 1982.

During 1982-83 total expenditure on the capital works program and the planning and research program was \$47.2m.

5 ROADS

Road Lengths and Surface Types

Queensland roads, classified according to the nature of their construction and grouped by types of Local Authority Areas in which they are situated, are shown in the next table.

ROADS NORMALLY OPEN TO TRAFFIC, QUEENSLAND, 30 JUNE 1982
(kilometres)

Local Authority	Surface type			Total formed roads	Unformed roads	All roads
	Scaled	Formed and surfaced	Formed only			
Brisbane	4,107	300	—	4,407	11	4,418
Other Cities	5,092	192	831	6,115	694	6,809
Towns	723	124	310	1,157	448	1,605
Shires	39,074	33,959	56,499	129,532	20,049	149,581
Total	48,996	34,575	57,640	141,211	21,202	162,413

Finance for Roads

Although certain of the more important roads are under the control of the Main Roads Department, most of the roads are solely under the control of the Local Authorities and are constructed and maintained by them. The construction of these roads may be financed by the expenditure of the Local Authorities' own funds, or by Treasury or other loans. In many cases,

whatever the method of finance, construction is assisted by the State and Commonwealth Governments from government funds.

Since 1923 Commonwealth Government funds have been made available to the States for roads, firstly by the provision of a fixed annual amount, then from 1931 on a basis associated with the yield from the tax on petrol, and from 1959 by way of basic grants plus additional amounts on a dollar for dollar basis subject to certain conditions.

Funds provided by the Commonwealth Government for 1982-83 were mainly by way of grants under the *Roads Grants Act* 1981 and the *Australian Bi-centennial Road Development Trust Fund Act* 1982.

The amount of \$149,348,000 received by Queensland during 1982-83 as contribution in respect of the basic grant and additional grants was credited to the following funds: Main Roads Fund, \$127,712,761; and Commonwealth Aid Local Authority Road Fund, \$21,635,239.

The Main Roads Department recorded a direct expenditure of \$246.8m on the construction and maintenance of roads during 1981-82, while Local Authorities spent a further \$181.7m, making a total expenditure on roads, streets, and bridges of \$428.5m.

The principal sources of funds of the Main Roads Department are motor vehicle registration fees and contributions from the Commonwealth Government. Receipts and expenditure are shown in the next table.

MAIN ROADS DEPARTMENT, QUEENSLAND
(Source: Queensland Main Roads Department)
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
RECEIPTS						
Motor vehicle registration fees	58,830	73,852	77,169	83,007	131,757	141,062
State Government loan	12,180	6,985	17,640	21,210	13,140	18,500
State Government grant	350	525	410	450	505	566
Roads—Contribution to Maintenance Act	5,435	5,494	1,426	173	69	70
Roads Grants Act	85,254	91,743	99,655	107,858	115,268	127,713
Commonwealth Aid L.A.A. Road Fund	14,746	15,204	15,292	19,906	24,093	21,635
Other grants	3,816	3,730	3,158	2,264	1,126	28,736
Maintenance repayments account Local Authority Roads	599	591	689	632	900	1,160
Hire, rent, and sale of plant						
Hire of plant	9,077	9,541	10,288	11,134	12,970	14,779
Plans, survey charges, and sale of plant	8,880	10,520	11,279	14,082	14,731	20,965
Other receipts—Main Road and Traffic Engineering Trust Funds	3,047	3,399	3,859	8,800	8,681	7,273
Total receipts	202,215	221,584	240,864	269,517	323,241	382,459
EXPENDITURE						
Permanent road works and surveys						
Construction: Declared roads	113,074	121,003	135,194	137,875	170,509	193,941
Other roads	391	444	409	442	473	548
Traffic engineering	1,382	1,224	1,610	2,258	2,520	2,782
Commonwealth Aid L.A.A. Road Fund	14,746	15,204	15,292	19,906	24,093	21,635
Roads maintenance account, payments to Local Authorities	1,901	1,866	1,311	50	270	92
Maintenance of roads	35,535	44,033	46,583	58,561	75,826	84,427
Plant, machinery, and buildings	8,730	9,614	10,662	11,688	13,386	20,597
Loans—interest and redemption	2,185	2,777	3,170	4,962	6,810	8,896
Administrative costs (a)	23,898	24,415	26,322	32,222	34,226	40,830
Less Administrative recoveries	-300	-293	-541	-610	-337	-1,191
Total expenditure	201,542	220,287	240,012	267,354	327,775	372,558

(a) Including cost of collecting motor vehicle fees, administration, and survey and design expenses which are subsequently charged to road construction.

Gateway Bridge, Brisbane

During 1983, the Main Roads Department continued in its involvement in the construction of the Gateway Bridge which will form part of the North-South Arterial Road. The main span of the bridge (260 metres) is the longest of its type yet to be built. The anticipated cost of the Gateway Bridge is \$135m and it is expected to be open to traffic early in 1986.

Gazetted Roads

The Main Roads Department controls and has a major financial responsibility in the maintenance and construction of such roads as have been gazetted under the *Main Roads Act* 1920-1979. These are classified as State Highways, Developmental, Main, and Secondary Roads, Urban Arterial Roads, and Urban Sub-arterial Roads. The network of State Highways and Development Roads is illustrated in the map facing page 224.

QUEENSLAND ROADS AT 30 JUNE (a)
(Source: Queensland Main Roads Department)
(kilometres)

Type of road	1978	1979	1980	1981	1982	1983
Main Roads Department, Gazetted Roads						
State Highways	10,354	10,348	10,342	10,363	10,348	10,344
Developmental	8,028	8,025	8,025	8,036	8,036	8,046
Main	8,558	8,613	8,612	8,606	8,606	8,589
Secondary	13,029	13,019	13,018	13,023	13,020	13,019
Other	152	152	152	151	149	(b) 149
Total Gazetted Roads	40,121	40,157	40,149	40,179	40,159	40,147
All formed roads	133,295	134,586	137,785	138,405	141,211	n.y.a.

(a) Figures from 1979 were provided by the Grants Commission and those for previous years by Local Authorities.

(b) Including 66 kilometres of Urban Arterial Road and 83 kilometres of Urban Sub-arterial Road.

The surfaces of the 40,147 kilometres of roads gazetted at 30 June 1983 were as follows: bitumen surfaced or concrete pavement, 25,458 kilometres; gravelled pavement, 3,029 kilometres; formed only, 9,653 kilometres; and unformed, 2,007 kilometres. The actual length of bitumen surfaced roads completed by the Department during the year ended 30 June 1983, including upgrading the surfaces, was 2,964 kilometres.

Local Authorities are required to contribute towards the costs of construction and maintenance of Gazetted Roads. The following rates applied at 30 June 1983.

	For permanent works	For maintenance
State Highways and Urban Arterials	Nil	Nil
Developmental Roads	Nil	Nil
Main Roads	10 per cent of capital cost with interest, repayable over 30 years	Nil
Urban Sub-arterials	10 per cent of capital cost with interest, repayable over 30 years	Nil
Secondary Roads	15 per cent of capital cost with interest, repayable over 30 years	10 per cent

The Department and the Local Authorities jointly contribute to the costs of work, and they co-operate to their mutual benefit in matters pertaining to roadworks, including design, construction, and maintenance.

In most cases work is carried out under the supervision of the Local Authority in whose area the work lies, but in certain instances work is directly supervised by the Department, especially

for the construction of State Highways to which the Local Authority is not required to make any financial contribution.

In providing for the future development of State Highways, the need for limited access highways has been recognised. This involves the control of roadside development to ensure that a high traffic flow is maintained. Limited access has been applied to several sections of the State Highways.

The Commissioner of Main Roads, as the traffic engineering authority, advises the Minister on traffic engineering matters, and is responsible for uniformity in signs, standards, and methods. Local Authorities are responsible for implementing traffic engineering measures, except on roads declared under the Main Roads Act.

The laboratories of the Main Roads Department carry out tests on materials such as soils, gravels, stone, aggregates for bitumen and for concrete work, bitumen emulsion, and paints, and the universities, the Government Analyst, and the Railway Department co-operate in testing materials such as steel, bitumen, and cement.

6 ROAD TRANSPORT

Motor Vehicles

The table below shows the estimated number of vehicles on the Main Roads Department Register at 30 June for six years. 'Trucks' comprise rigid trucks and articulated vehicles with a gross vehicle mass over 4 tonnes as well as other truck-type (non-freight-carrying) vehicles. Utilities and panel vans include all commercial vehicles registered with a gross vehicle mass of 4 tonnes or less.

MOTOR VEHICLES ON REGISTER (a), QUEENSLAND, AT 30 JUNE

Type of vehicle	1978	1979	1980	1981	1982	1983
	'000	'000	'000	'000	'000	'000
Cars and station wagons	794.7	835.3	884.0	946.1	997.7	(b) 1,037.5
Buses	4.4	4.8	5.2	5.9	6.7	7.7
Trucks	56.8	58.8	61.1	65.6	69.7	70.8
Utilities and panel vans	196.6	208.9	225.0	246.6	266.9	281.1
Motor cycles	77.0	75.6	81.4	91.3	98.4	99.0
All motor vehicles	1,129.6	1,183.4	1,256.9	1,355.6	1,439.5	1,496.1
	\$	\$	\$	\$	\$	\$
Revenue collected (c)	88,176,585	106,602,769	108,434,475	117,607,667	173,728,045	199,821,466

(a) Including vehicles registered at the Main Roads Department and Commonwealth Government-owned vehicles, but excluding all defence service vehicles. (b) Including 2,285 licensed as taxicabs. (c) During year ended 30 June.

At 30 June 1983 the numbers of motor vehicles (excluding motor cycles) per 1,000 population in the various Australian States and Territories were as follows: New South Wales, 504; Victoria, 540; Queensland, 565; Western Australia, 556; South Australia, 542; Tasmania, 563; Northern Territory, 434; and Australian Capital Territory, 472. Five years earlier, at 30 June 1978, the number for Queensland was 485.

During 1982-83, new vehicles registered in Queensland were as follows: cars and station wagons, 79,171; utilities, 14,589; panel vans, 9,120; rigid trucks, 3,104; articulated trucks, 435; other truck types, 218; motor cycles, 12,347; and buses, 1,028.

The registrations of new motor vehicles in the six years to 1982-83 have been as follows: 1977-78, 92,678; 1978-79, 100,038; 1979-80, 107,595; 1980-81, 120,919; 1981-82, 129,708; and 1982-83, 120,012.





EXTERNAL TRADE—Chapter 19

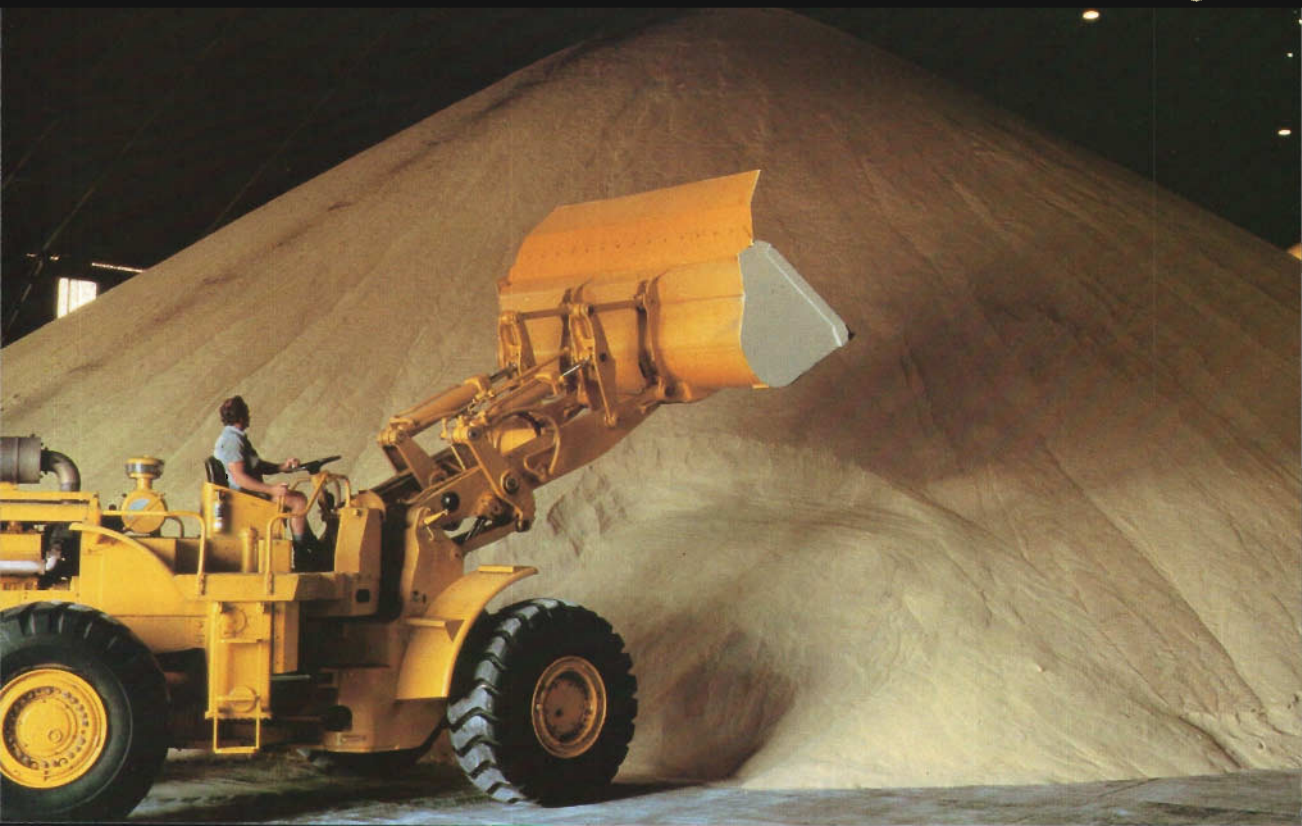
Photo: Department of Commercial and Industrial Development

Loading crude lead, container terminal, Townsville

A 'mountain' of raw sugar

MARKETING—Chapter 20

Photo: Department of Commercial and Industrial Development



Registration of Motor Vehicles

All motor vehicles (including motor cycles) used on public roads must be registered with the Commissioner of Main Roads. Vehicles used in certain districts or on certain routes in carrying out any passenger service under licence or permit must be approved by the Commissioner for Transport under the *State Transport Act* 1960–1981. In addition, taxicabs and other vehicles for hire must be licensed.

Fees Payable

Following increases in the scale of motor vehicle fees and other charges, annual registration fees now payable are: passenger cars and their derivatives, e.g. station wagons and commercial type motor vehicles such as utilities, panel vans, and rigid trucks, not exceeding 4 tonnes gross vehicle mass, range from \$54 to \$186, depending on the number of cylinders; rigid trucks and cab and chassis intended for use as rigid trucks, \$122, plus \$45 per tonne or part thereof by which the gross vehicle mass exceeds 4 tonnes; trailers and caravan trailers, gross vehicle mass not exceeding 1.02 tonnes, \$21, exceeding 1.02 tonnes, \$40; motorised caravans and omnibuses, \$137, plus \$30 per tonne or part thereof by which the gross vehicle mass exceeds 4 tonnes; prime movers, \$167, plus \$30 per tonne or part thereof by which the gross vehicle mass exceeds 7 tonnes; mobile machinery and equipment up to 1 tonne gross vehicle mass, \$37, plus \$13 per tonne or part thereof by which the gross vehicle mass exceeds 1 tonne; vehicles with a load capacity over 4.1 tonnes, owned and used by a primary producer solely in connection with his business, \$20; and motor cycles, \$21.

The owner of a motor vehicle or motor cycle must pay a nominal defendant fee of \$3 and a traffic improvement fee of \$11 a year. Of the traffic improvement fee, \$8.80 is paid into Consolidated Revenue while the remainder is allocated to the Traffic Engineering Trust Fund for the purpose of improving traffic conditions. No such fees are payable in respect of a tractor or trailer.

Fees for drivers' licences are charged at the rate of \$2.20 a year and are issued for periods ranging from one to five years.

Stamp duty calculated at the rate of \$2 per \$100 or part thereof of the market value of the motor vehicle, is payable on the registration and/or transfer of registration of any motor vehicle.

Drivers

Under the provisions of the *Traffic Act* 1949–1982, every driver of a motor vehicle must obtain a driver's licence. A person learning to drive is required to obtain a learner's permit and, after qualifying, is issued with a provisional licence which is valid for one year. A provisional licensee is normally issued with an ordinary licence after this period.

Drivers are subject to a demerit points system. On accumulating nine points in the immediately preceding period of two years, drivers may be called upon to show cause why their licence should not be suspended or cancelled. Provisional licences are automatically cancelled if four demerit points are accumulated by the holders, who then cannot be issued with a further licence for a period of at least three months. After this period has expired and the necessary qualifying tests are passed again, they will be issued with another provisional licence.

Where a court orders that any person be disqualified absolutely or for a specified period from holding or obtaining a driver's licence, every subsisting licence held by that person is automatically cancelled. At the end of the disqualification period and before any further driver's licence is issued, that person is required to undertake and pass the prescribed tests, and any licence issued must be a provisional licence.

The *Motor Vehicles Insurance Act* 1936–1979 requires owners to be insured, before registering their vehicles, and to remain insured against unlimited liability for personal injury caused by negligence or wilful default of drivers (Third Party Risk). The owners of all vehicles are required to pay a Motor Vehicle Insurance Nominal Defendant Fund fee of \$3 a year per vehicle to provide insurance cover for persons who are injured in accidents involving unidentified or unregistered vehicles.

Licensing of Road Transport

The regulation of the public transport of passengers and goods is a function of the Commissioner for Transport.

A wide range of commercial vehicles is required to hold a licence to hire under the *State Transport Act* 1960–1981, including private hire cars, taximeter cabs, exempted cabs, vehicles to be let for hire, and goods-carrying vehicles. At 30 June 1983 there were 26,024 such vehicles licensed.

Road passenger services within Queensland must be authorised either under a service licence, of which 156 were current at 30 June 1983, or an extended permit (passengers) of which 440 were current at 30 June 1983. An extended permit normally authorises the provision of a service for a much shorter period than a licence.

Vehicles that are authorised for use under a licence or permit must be approved by the Department. This approval is subject to the Department's inspection of the mechanical condition and suitability of the vehicle, and to its verification of the permitted carrying capacity.

7 ROAD TRAFFIC ACCIDENTS

Summary for Six Years

The next table gives a summary of road traffic accidents in Queensland for six years to 1982.

Traffic accidents included in the following tables are those which are reported as required by law to the Police, and comprise accidents which resulted in death or injury to persons or in property damage above a statutory amount. The requirement with respect to property damage was raised from \$300 to \$1,000 on 1 October 1978. Injury statistics are of persons requiring medical or hospital treatment.

When casualties are related to the number of motor vehicles on the register and to the population of the State, both death and injury rates have shown a downward trend in recent years.

ROAD TRAFFIC ACCIDENTS, QUEENSLAND

Year	Motor vehicles (a)	Persons killed	Persons injured	Per 10,000 vehicles (a)		Per 10,000 population	
				Persons killed	Persons injured	Persons killed	Persons injured
1977	1,067,218	572	10,002	5.4	93.7	2.7	47.0
1978	1,129,606	612	10,850	5.4	96.1	2.8	50.0
1979	1,183,419	613	10,303	5.2	87.1	2.8	46.5
1980	1,256,864	557	9,883	4.4	78.6	2.5	43.6
1981	1,355,631	594	9,968	4.4	73.5	2.5	42.5
1982	1,439,457	602	9,672	4.2	67.2	2.5	40.0

(a) Number on register at 30 June, excluding all defence service vehicles, mobile equipment, and trailers.

Types of Road Users Killed or Injured

The next table shows the total numbers of road accidents reported, distinguishing those involving casualties, and also classifies persons killed or injured by type of road user.

In 1982 one motor cyclist was killed or seriously injured for every 60 motor cycles on the register, compared with one driver for every 346 of all other types of motor vehicles.

ROAD TRAFFIC ACCIDENTS, QUEENSLAND

Year	Accidents reported		Casualties									
	Total	Casualty (a)	Pedestrians		Motor drivers		Motor cyclists		Pedal cyclists		Others (b)	
			K.	Inj.	K.	Inj.	K.	Inj.	K.	Inj.	K.	Inj.
1977	24,977	7,696	92	756	215	3,712	97	1,670	27	349	141	3,515
1978	(c) 25,003	8,094	92	742	237	4,162	70	1,661	15	410	198	3,875
1979	16,562	7,746	95	702	242	3,941	91	1,491	13	423	172	3,746
1980	16,507	7,638	87	733	211	3,738	87	1,563	14	442	158	3,407
1981	16,863	7,768	66	754	237	3,794	92	1,633	16	484	183	3,303
1982	15,980	7,543	71	746	255	3,617	94	1,544	18	475	164	3,290

(a) Accidents involving death or injury. (b) Passengers in vehicles etc. (c) The limit of property damage, above which the reporting of a road traffic accident is required, was raised from \$300 to \$1,000 on 1 October 1978.

Ages of Persons Killed or Injured

The next table shows the ages of persons killed or injured, according to type of road user. For persons aged 17 to 20 years, the casualty rate per 10,000 persons was more than three times the average.

Persons under 17 years comprised 37.6 per cent, and persons aged 60 and over 16.4 per cent, of all pedestrian casualties; persons from 17 to 29 years, 53.3 per cent of all motor driver casualties; persons from 17 to 29 years, 83.4 per cent of all motor cyclist casualties; persons from 7 to 16 years, 65.7 per cent of all pedal cyclist casualties; and persons 7 to 29 years, 66.3 per cent of all passenger casualties.

AGES OF PERSONS KILLED OR INJURED IN ROAD TRAFFIC ACCIDENTS, QUEENSLAND, 1982

Age group (years)	Pedestrians	Motor drivers	Motor cyclists	Pedal cyclists	Passengers	Others (a)	Total	Rate per 10,000 persons
Under 5	55	—	—	—	184	—	239	12.4
5-6	49	—	—	22	69	—	140	17.8
7-16	203	18	44	324	643	3	1,235	28.3
17-20	68	920	585	45	871	1	2,490	145.0
21-24	63	624	503	24	472	—	1,686	98.2
25-29	54	518	278	13	300	—	1,163	58.8
30-39	65	756	139	18	259	—	1,237	34.2
40-49	50	402	45	12	167	—	676	27.2
50-59	71	285	22	9	186	—	573	25.3
60 and over	134	324	18	23	267	1	767	22.9
Not stated	5	25	4	3	31	—	68	..
Total	817	3,872	1,638	493	3,449	5	10,274	42.5

(a) Drivers of animal-drawn vehicles, riders of horses, etc.

Day and Time of Occurrence

In 1982 the greatest number of accidents occurred on Fridays which had 2,860, followed by Saturdays, 2,761, and Thursdays, 2,233.

According to time of day, the greatest number of accidents, 17.6 per cent of the total, happened between 4 and 6 p.m., and the next greatest, 12.8 per cent, between 6 and 8 p.m.

Types of Accidents

The next table shows the total accidents reported, the number of persons killed or injured, and types of vehicles involved, for the Brisbane Statistical Division and the whole State.

ROAD TRAFFIC ACCIDENTS, QUEENSLAND, 1982

Type of accident	Accidents reported		Persons killed		Persons injured	
	Total	Casualty (a)	Brisbane Stat. Divn	Total Queensland	Brisbane Stat. Divn	Total Queensland
<i>Collisions</i>						
Car, wagon, utility, or van with						
Car, wagon, utility, or van	6,935	2,016	32	117	1,422	3,185
Truck etc.	878	336	13	72	169	429
Motor cycle	1,183	1,037	22	62	508	1,103
Other motor vehicle (b)	137	49	—	—	42	87
Pedal cycle	408	384	7	12	174	383
Other vehicle (c)	65	28	—	3	6	34
Parked vehicle	737	178	3	5	115	209
Pedestrian	700	684	30	59	373	661
Straying animal	169	43	—	5	4	54
Object	1,878	1,002	30	118	439	1,337
Truck etc. with						
Truck etc.	73	19	—	3	7	23
Motor cycle	51	50	1	5	20	54
Other motor vehicle (b)	18	8	—	—	3	8
Pedal cycle	19	18	1	2	10	16
Other vehicle (c)	14	2	—	1	—	1
Parked vehicle	52	2	—	—	2	2
Pedestrian	20	19	3	6	6	14
Straying animal	17	5	—	—	—	7
Object	127	41	—	1	12	49
Motor cycle with						
Motor cycle	29	29	—	6	10	43
Other motor vehicle (b)	13	12	—	2	4	10
Pedal cycle	19	17	1	2	10	26
Other vehicle (c)	2	2	—	1	—	1
Parked vehicle	35	34	2	4	15	32
Pedestrian	43	42	1	1	22	51
Straying animal	70	64	—	2	15	74
Object	173	171	4	19	58	181
Other motor vehicle (b) with						
Other motor vehicle (b)	2	1	—	—	1	1
Pedal cycle	3	3	—	—	2	3
Other vehicle (c)	1	—	—	—	—	—
Parked vehicle	4	—	—	—	—	—
Pedestrian	14	14	4	4	8	11
Straying animal	5	2	—	—	—	7
Object	10	4	—	—	4	6
Pedal cycle with						
Pedal cycle	2	2	—	—	1	2
Other vehicle (c)	1	1	—	—	1	1
Parked vehicle	28	23	1	1	9	22
Pedestrian	4	4	—	—	2	4
Straying animal	2	2	—	—	2	2
Object	6	6	—	—	4	6
Other vehicle (c) with						
Other vehicle (c)	—	—	—	—	—	—
Parked vehicle	—	—	—	—	—	—
Pedestrian	3	3	2	2	—	1
Straying animal	—	—	—	—	—	—
Object	—	—	—	—	—	—
<i>Non-collisions</i>						
Car, wagon, utility, or van	1,511	790	6	70	155	1,086
Truck etc.	191	86	1	9	13	88
Motor cycle	272	257	1	7	76	292
Other motor vehicle (b)	21	18	—	—	16	30
Pedal cycle	34	34	—	1	12	35
Other vehicle (c)	1	1	—	—	—	1
Total	15,980	7,543	165	602	3,752	9,672

(a) Accidents involving death or injury, railway vehicles, etc.

(b) Including buses, tractors, etc.

(c) Including ridden animals, animal-drawn vehicles,

Road Traffic Accident Casualty Rates

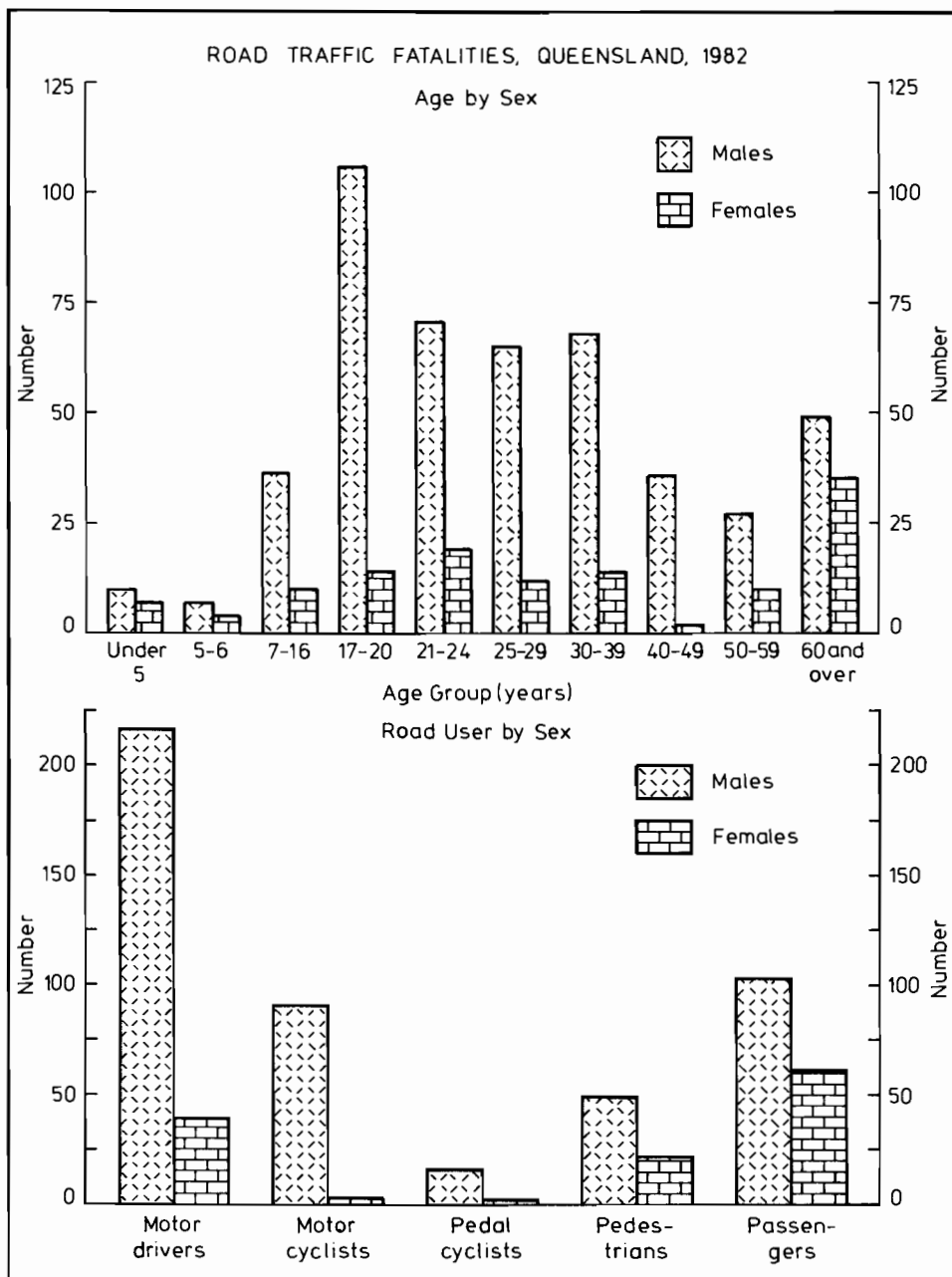
The next table shows the percentage distribution of persons in various age groups for each type of road user.

ROAD TRAFFIC ACCIDENT CASUALTIES (a), QUEENSLAND

Year	Percentage of casualties in age group (years)											All ages
	Under 5	5-6	7-16	17-20	21-24	25-29	30-39	40-49	50-59	60 and over	Not stated	
PEDESTRIANS												
1977	9.2	7.8	23.2	8.7	8.9		7.7	5.9	9.3	17.3	2.0	100.0
1978	7.2	8.3	20.7	8.4	7.8		7.6	6.8	9.9	21.7	1.6	100.0
1979	6.0	6.9	24.0	8.8	9.4		5.8	6.4	9.9	21.8	1.0	100.0
1980	6.6	7.1	22.9	8.9	5.5	5.7	7.3	6.4	10.1	18.9	0.6	100.0
1981	7.1	4.9	26.2	8.7	5.7	5.5	6.0	7.8	9.0	18.9	0.2	100.0
1982	6.7	6.0	24.8	8.3	7.7	6.6	8.0	6.1	8.7	16.4	0.7	100.0
MOTOR DRIVERS												
1977	—	—	0.5	24.5	28.2		16.6	10.9	8.9	8.1	2.3	100.0
1978	—	—	0.5	25.7	29.3		17.4	9.6	8.0	7.9	1.6	100.0
1979	—	—	0.5	24.5	29.6		16.9	10.6	8.8	8.0	1.1	100.0
1980	—	—	0.7	24.2	16.8	13.7	16.9	9.9	8.4	8.8	0.6	100.0
1981	—	—	0.7	24.0	15.8	13.6	18.7	10.1	7.1	9.6	0.4	100.0
1982	—	—	0.5	23.8	16.1	13.4	19.5	10.4	7.4	8.4	0.5	100.0
MOTOR CYCLISTS												
1977	—	—	2.5	47.2	35.8		7.5	2.4	1.3	0.5	2.8	100.0
1978	—	—	2.7	44.4	35.3		9.1	4.8	1.4	0.7	1.6	100.0
1979	—	—	2.7	40.3	44.0		7.0	3.6	1.8	0.4	0.2	100.0
1980	—	—	3.0	35.7	27.5	15.7	10.2	4.2	2.3	0.8	0.6	100.0
1981	—	—	1.8	38.0	27.0	15.7	11.1	3.0	2.1	1.0	0.3	100.0
1982	—	—	2.7	35.7	30.7	17.0	8.5	2.7	1.3	1.1	0.3	100.0
PEDAL CYCLISTS												
1977	—	3.7	68.6	5.6	6.1		1.9	2.7	3.4	7.7	0.3	100.0
1978	—	2.8	65.7	9.9	6.6		2.8	2.6	3.3	5.4	0.9	100.0
1979	—	2.8	68.8	8.0	6.4		3.0	2.1	3.0	5.7	0.2	100.0
1980	—	2.9	63.6	9.2	5.5	3.9	4.6	1.8	2.6	5.7	0.2	100.0
1981	—	2.2	65.8	11.0	5.0	3.8	3.6	2.2	1.8	4.6	—	100.0
1982	—	4.5	65.7	9.1	4.9	2.6	3.7	2.4	1.8	4.7	0.6	100.0
OTHERS (b)												
1977	6.0	2.1	21.0	26.0	17.8		5.9	5.1	5.4	7.6	3.1	100.0
1978	6.2	3.0	20.4	24.5	18.2		7.1	5.4	4.8	8.2	2.2	100.0
1979	6.5	2.7	20.3	24.7	18.8		7.9	4.9	5.7	7.5	1.0	100.0
1980	5.7	2.2	20.0	24.5	12.8	7.1	6.8	5.5	5.1	9.1	1.2	100.0
1981	6.1	1.9	19.7	24.3	12.9	6.7	7.4	5.6	4.8	9.9	0.7	100.0
1982	5.3	2.0	18.7	25.2	13.7	8.7	7.5	4.8	5.4	7.8	0.9	100.0
ALL PERSONS												
1977	2.8	1.5	12.1	26.9	23.5		10.1	6.8	6.3	7.4	2.6	100.0
1978	2.7	1.8	11.8	26.3	23.8		11.2	6.9	5.8	7.9	1.8	100.0
1979	2.7	1.6	12.4	25.0	25.4		10.9	6.9	6.5	7.7	0.9	100.0
1980	2.5	1.4	12.1	24.3	15.7	10.7	11.1	6.9	6.2	8.3	0.8	100.0
1981	2.5	1.1	12.2	24.6	15.4	10.5	12.0	6.9	5.5	8.8	0.5	100.0
1982	2.3	1.4	12.0	24.2	16.4	11.3	12.0	6.6	5.6	7.5	0.7	100.0

(a) Persons killed or injured.

(b) Passengers in vehicles etc.



8 AIR TRANSPORT

For the history of air transport, the reader is referred to the 1977 *Year Book*.

A network of intrastate services connects major Queensland towns and links them with the southern capitals and with Papua New Guinea. Brisbane is a port of call on the regular passenger schedules of the international services of Qantas and other airlines.

Airline companies also provide planes for taxi and charter work, and the Flying Doctor Service operates throughout western Queensland.

The number of aircraft registered in Queensland at 30 June 1983 was 1,406. Under the provisions of the *State Transport Act* 1960–1981, licences are issued for the carriage of passengers and goods by air within the State.

The costs of operation and maintenance in 1982–83 for the two major airports in the State, Brisbane and Townsville, were Brisbane, \$16,564,000, which includes \$5,350,000 for navigation aids and \$5,747,000 for air traffic control operation, and Townsville, \$4,074,000, including \$1,546,000 for navigation aids and \$1,904,000 for air traffic control operation.

The volume of business in passengers and freight and the number of aircraft movements at the principal airports in Queensland in 1982–83 are shown in the next table.

PASSENGER, FREIGHT, AND AIRCRAFT MOVEMENTS AT QUEENSLAND AIRPORTS (a), 1982–83

Airport	Passengers (b)	Freight	Aircraft (c) movements
	No.	tonnes	No.
Brisbane	2,943,835	36,888	38,178
Bundaberg	10,757	26	1,448
Cairns	403,429	4,482	5,872
Coolangatta	553,709	1,372	8,349
Emerald	7,919	14	491
Gladstone	46,037	93	2,385
Hayman Island	22,923	5	1,919
Mackay	160,517	1,174	4,781
Maroochydore	38,560	22	1,348
Mount Isa	109,120	1,311	2,986
Proserpine	106,949	246	3,301
Rockhampton	162,776	1,371	6,877
Thursday Island	12,137	107	696
Townsville	407,510	5,155	12,039
Weipa	16,733	1,301	1,487

(a) Airports handling fewer than 5,000 passengers are not included.

(b) Including 466,999 passengers on international services at Brisbane, Cairns, and Townsville.

(c) Including 5,114 international movements at Brisbane, Cairns, and Townsville.

9 POSTS AND TELECOMMUNICATIONS

In July 1975 two statutory corporations, the Australian Postal Commission (Australia Post) and the Australian Telecommunications Commission (Telecom Australia), were established. Together these provide the forms of communications previously under the jurisdiction of the Postmaster-General's Department. These services include ordinary posts, telegraphs, telephones, telex services, and wireless telegraphy, and radio stations and television stations for the Australian Broadcasting Corporation. Telecom Australia in conjunction with the Overseas Telecommunications Commission (Australia) provides the radio and cable services linking Australia with other countries, with ships at sea, and to and between the external territories of Australia.

Post Offices

Details of official and non-official post offices in Queensland at 30 June for the last six years are given in the next table.

Non-official post offices are conducted by persons who are not members of the Commonwealth Public Service and who receive an allowance based on business transacted. In many instances, this type of office is conducted in conjunction with some other business activity.

POST OFFICES, QUEENSLAND, AT 30 JUNE
(Source: Australia Post)

Post offices	1978	1979	1980	1981	1982	1983
Official	224	225	222	219	217	210
Non-official	639	597	577	562	544	544
Total	863	822	799	781	761	754

Post Office Business

The postal order and money order operations of the post offices in Queensland are shown in the next table.

POSTAL AND MONEY ORDERS, QUEENSLAND
(Source: Australia Post)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Postal orders						
Issued						
Number	359,948	(a)	(a)	(a)	(a)	(a)
Value \$	1,784,602					
Commission \$	130,038					
Paid						
Number	355,705					
Value \$	1,772,003					
Money orders						
Issued						
Number	1,166,599	1,637,491	1,806,709	1,923,803	1,877,201	1,745,472
Value \$	53,701,012	74,227,123	90,199,894	104,362,297	119,965,032	122,381,972
Commission \$	857,260	999,186	1,146,967	1,383,258	1,804,740	1,951,528
Paid						
Number	1,157,160	1,458,812	1,573,803	1,664,396	1,192,828	1,611,764
Value \$	52,203,341	71,001,967	87,881,410	101,630,511	119,448,976	121,236,496

(a) Postal and money orders were replaced on 21 November 1977 by a single postal money order service.

Postal business in Queensland is shown in the next table. The figures comprise the mail matter lodged in Queensland for delivery in Australia or overseas.

POST OFFICE BUSINESS IN QUEENSLAND
(Source: Australia Post and Telecom Australia)
(^{'000})

Year	Letters and postcards	Newspapers etc.	Registered articles (a)	Parcels (b)	Telegrams and cablegrams
1977-78	273,826	29,423	640	3,218	1,853
1978-79	288,651	33,498	589	3,074	1,453
1979-80	295,349	35,301	630	3,516	1,143
1980-81	307,270	41,888	616	4,139	1,044
1981-82	330,037	42,399	598	4,436	959
1982-83	347,555	48,252	637	4,867	842

(a) Other than registered parcels.

(b) Including registered parcels.

Telegram and Telephone Services

The business activity of the telegram, teleprinter, and telephone services in Queensland are shown in the next table.

Telex subscribers are provided with a teleprinter in their own premises and may be connected with other subscribers in Australia and in a number of overseas countries. The

number of telex subscribers in Queensland increased from 3,347 in 1977-78 to 6,596 in 1982-83 and the number of calls from 5,455,000 to 8,430,000.

TELEGRAMS AND TELEPHONES, QUEENSLAND
(Source: Telecom Australia)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Telegrams						
Sent within Australia						
Number	1,689,257	1,300,713	1,002,494	915,113	828,655	739,804
Value \$	3,903,880	4,018,447	3,963,507	3,758,663	3,515,298	3,262,353
Sent overseas						
Number	163,465	151,974	140,560	129,118	130,077	101,842
Value \$	399,860	420,382	416,493	462,836	494,222	465,402
Telex (a) services						
Subscribers No.	3,347	3,906	4,599	5,399	6,166	6,596
Calls No.	5,455,000	6,044,000	6,790,000	7,518,000	8,092,000	8,430,000
Telephones						
New services No.	61,167	70,515	80,841	94,969	94,821	95,048
Telephone services (b) .. No.	530,594	575,701	625,217	689,971	750,917	801,073
Instruments connected (b) .. No.	735,262	797,906	861,909	950,443	1,047,193	1,103,479
Instruments per 100 population (b) No.	34.0	36.4	38.5	41.2	43.3	44.5
Services with access to S.T.D.(c) No.	500,961	548,027	600,859	667,420	743,074	793,000
Trunk calls dialled by subscribers %	77.5	80.1	85.6	88.1	90.4	92.6
Revenue \$'000	236,576	265,522	314,802	366,846	431,645	504,680

(a) See text preceding table.
dialling.

(b) At 30 June. Telephone services include each duplex subscriber separately.

(c) Subscriber trunk

10 RADIO AND TELEVISION SERVICES

Radiocommunications

Wireless telegraphy and telephony are controlled by the Commonwealth Government, and various types of radiocommunication stations are authorised for operation by the Department of Communications.

NUMBER OF RADIOCOMMUNICATION STATIONS, QUEENSLAND, AT 30 JUNE
(Source: Commonwealth Department of Communications)

Type of station	1981	1982	1983	Type of station	1981	1982	1983
Aeronautical	91	74	97	Interior paging	150	167	168
Aircraft	741	791	707	Land mobile paging receiver	55	124	128
Amateur	1,976	2,228	2,355	Limited coast	96	93	255
Base	5,116	5,842	6,475	Marine rescue	130	170	214
CBRS	9,857	11,218	34,324	Mobile	35,178	41,549	44,107
Coast	5	4	5	Mobile outpost	740	804	2,913
Disaster	—	13	340	OBTS	—	—	11
Experimental	118	132	145	Radio-determination	15	11	19
Exterior paging service	—	—	14	Radio-linked microphone	181	239	264
Fixed	657	1,274	1,226	Ship (Class a)	4,537	5,318	6,885
Fixed aeronautical (private)	10	5	13	Ship (Class b, c)	3,596	4,513	5,726
Fixed outpost	700	420	867	Special	19	—	—
Fixed receiving	129	135	141				
Handphone	238	659	2,089	Total	64,335	75,783	109,488

Broadcasting and Television

Broadcasting and television services are controlled by the Australian Broadcasting Tribunal under the direction of the Minister for Communications. The services comprise commercial broadcasting and television services, and television repeater stations operated by

private enterprise in remote communities. The Australian Broadcasting Corporation was established on 1 July 1983 and replaced the Australian Broadcasting Commission. The Corporation is a statutory body independent in program policy of the government of the day, but funded by annual appropriation of Commonwealth Parliament.

Commercial broadcasting and television stations are operated by licensed private operators who derive their income from advertisements.

At 30 June 1983 five public broadcasting stations, 4ZZZ, 4MBS, 4DDB, 4EB, and 4TTT were operating in Queensland. A public broadcasting licence is granted for a special purpose which is specified in the licence.

BROADCASTING STATIONS, QUEENSLAND, AT 30 JUNE 1983
(Source: Australian Broadcasting Tribunal and Australian Broadcasting Corporation)

Type and location	Call sign	Hours of service per week	Type and location	Call sign	Hours of service per week	Type and location	Call sign	Hours of service per week
<i>National</i>			<i>National—continued</i>			<i>Commercial—continued</i>		
Medium frequency			Frequency modulation			Medium frequency—		
Brisbane	4QG	133½	Brisbane	4ABC	168	continued		
Brisbane	4QR	..	Rockhampton ..	4ABC	168	Longreach	4LG	133
Atherton	4AT	..	Toowoomba	4ABC	168	Mount Isa	4LM	140
Gympie	4GM	..	Townsville	4ABC	168	Maryborough ..	4MB	121½
Hughenden	4HU	..				Mackay	4MK	132
Julia Creek	4JK	..	<i>Commercial</i>			Nambour	4NA	132
Mount Isa	4MI	..	Medium frequency			Rockhampton ..	4RO	168
Mossman	4MS	..	Brisbane	4BC	168	Kingaroy	4SB	118
Mackay	4QA	..	Brisbane	4BH	168	Townsville	4TO	168
Maryborough ..	4QB	..	Brisbane	4BK	168	Charleville	4VL	119
Emerald	4QD	..	Brisbane	4IO	168	Warwick	4WK	133
Longreach	4QL	..	Brisbane	4KQ	168	Roma	4ZR	123
Townsville	4QN	..	Oakey	4AK	168	Frequency modulation		
Eidsvold	4QO	..	Atherton-Mareeba	4AM	143	Brisbane	4MMM	168
Toowoomba	4QS	..	Ayr	4AY	168			
St George	4QW	..	Bundaberg	4BU	120½	<i>Public Broadcasting</i>		
Cairns	4QY	..	Cairns	4CA	168	Medium frequency		
Rockhampton ..	4RK	..	Gladstone	4CD	168	Brisbane	4EB	128½
Southport	4SO	..	Charters Towers	4GC	168	Frequency modulation		
Thursday Island	4TI	..	Gold Coast	4GG	168	Brisbane	4MBS	126
Weipa	4WP	..	Toowoomba	4GR	168	Brisbane	4ZZZ	168
High frequency			Gympie	4GY	168	Toowoomba	4DDB	99
Brisbane	VLM	..	Emerald	4HI	133	Townsville	4TTT	67½
Brisbane	VLQ	..	Innisfail-Tully ..	4KZ	132			

Regular television transmission commenced in Queensland in 1959. The following table shows the number of television stations in operation.

TELEVISION STATIONS, QUEENSLAND, AT 30 JUNE 1983
(Source: Australian Broadcasting Tribunal and Australian Broadcasting Corporation)

Area	Call sign and channel	Hours of service per week	Area	Call sign and channel	Hours of service per week
<i>National</i>			<i>National—continued</i>		
Brisbane	ABQ-2	94	Darling Downs ..	ABDQ-3	94
Augathella	ABAAQ-11	..	Emerald	ABEQ-11	..
Alpha	ABAAQ-8	..	Goondiwindi	ABGQ-6	..
Blackall	ABBLQ-9	..	Hughenden	ABHQ-9	..
Barcaldine	ABBQ-10	..	Mount Isa	ABIQ-6	..
Cunnamulla	ABCAQ-10	..	Julia Creek	ABJQ-10	..
Charleville	ABCEQ-9	..	Longreach	ABLQ-6	..
Cloncurry	ABCLQ-7	..	Mackay	ABMQ-4	..
Clermont	ABCTQ-10	..	Mary Kathleen ..	ABMKQ-9	..
Dirranbandi	ABDIQ-7	..	Mitchell	ABMLQ-6	..

TELEVISION STATIONS, QUEENSLAND, AT 30 JUNE 1983—*continued*

Area	Call sign and channel	Hours of service per week	Area	Call sign and channel	Hours of service per week
<i>National—continued</i>			<i>Commercial</i>		
Morven	ABMNQ-7	94	Brisbane	BTQ-7	120
Miles	ABMSQ-9	..	Brisbane	QTQ-9	168
Cairns	ABNQ-9	..	Brisbane	TVQ-0	122½
Roma	ABRAQ-7	..	Darling Downs	DDQ-10	85
Richmond	ABRDQ-6	..	Cairns	FNQ-10	81½
Rockhampton	ABRQ-3	..	Mount Isa	ITQ-8	57½
Springsure	ABSEQ-9	..	Mackay	MVQ-6	75
St George	ABSGQ-8	..	Rockhampton	RTQ-7	84
Southern Downs	ABSQ-1	..	Southern Downs	SDQ-4	85
Townsville	ABTQ-3	..	Wide Bay	SEQ-8	89½
Winton	ABWNQ-8	..	Townsville	TNQ-7	81½
Wide Bay	ABWQ-6	..			

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Transport (9101.3) (*annual*)

Motor Vehicle Registrations (9301.3) (*monthly*)

Motor Vehicle Census (9302.3) (*irregular*)

Road Traffic Accident Statistics in Local Authority Areas (9402.3) (*quarterly*)

Road Traffic Accidents (Detailed Analysis) (9403.3) (*quarterly*)

Road Traffic Accidents (9404.3) (*annual*)

Central Office Publications

Shipping and Cargo (9211.0) (*quarterly*)

Rail Transport (9213.0) (*annual*)

Motor Vehicle Registrations (9303.0) (*monthly*)

Motor Vehicle Registrations (9304.0) (*annual*)

Road Traffic Accidents Involving Fatalities (9401.0) (*monthly*)

Road Traffic Accidents Involving Casualties (Admissions to Hospitals) (9405.0) (*quarterly*)

Other Publications

Annual reports of the Department of Harbours and Marine, individual Harbour Boards, Port Authorities, the Commissioner for Railways, the Metropolitan Transit Authority, the Main Roads Department, the Commissioner for Transport, the Australian Postal Commission, Australian Telecommunications Commission, the Australian Broadcasting Tribunal, and the Australian Broadcasting Corporation.

Chapter 15

HOUSING AND CONSTRUCTION

1 HOUSING CENSUS

Information on existing housing is obtained from the householders' schedules collected at each Census of Population and Housing. Results of the 1981 Census, details from the 1976 Census, and some comparisons with previous Censuses are shown in this section.

Some of the results of the 1976 Census were derived from a 50 per cent sample of schedules and are therefore subject to sampling error. For further detail refer to Explanatory Notes, page xvi, in the 1982 issue of the *Year Book*.

Particulars of full-blood Aboriginals and dwellings occupied solely by them were excluded from published Census results prior to 1971. However, 1966 Census data in this section have been revised to include such particulars. Persons having diplomatic immunity and dwellings occupied by such persons have been excluded from all Censuses.

Definitions of terms used in this section may be found in the 1975 and earlier issues of the *Year Book*.

Dwellings at Censuses from 1921

The next table shows the numbers of occupied and unoccupied dwellings recorded in Queensland, according to the definitions and classifications adopted, at each Census from 1921 to 1981.

DWELLINGS AT CENSUSES, QUEENSLAND

Census date	Occupied dwellings				Unoccupied dwellings
	Private		Non-private	Total	
	Number	Average number of inmates			
1921	153,313	4.40	6,826	160,139	6,747
1933	210,427	4.14	5,695	216,122	9,311
1947	267,466	3.83	4,579	272,045	9,647
1954	332,883	3.63	6,445	339,328	21,473
1961	392,059	3.60	6,174	398,233	33,969
1966 (a)	443,225	3.52	7,084	450,309	41,818
1971	512,600	3.34	4,645	517,245	(b) 51,077
1976	598,140	3.18	4,286	602,426	62,686
1981	698,232	3.05	5,732	703,964	83,366

(a) Including particulars of dwellings occupied solely by full-blood Aboriginals. Census, unoccupied non-private dwellings were not enumerated.

(b) Unoccupied private dwellings only. From the 1971

Particulars of dwellings in the various States and Territories for the 1976 and 1981 Censuses are shown in the next table.

DWELLINGS, AUSTRALIA

State or Territory	Census 1976		Census 1981	
	Occupied	Unoccupied (a)	Occupied	Unoccupied (a)
New South Wales	1,499,001	152,960	1,662,758	153,251
Victoria	1,126,304	119,592	1,238,945	124,522
Queensland	602,426	62,686	698,232	83,366
South Australia	392,253	39,768	432,136	42,407
Western Australia	339,105	34,064	403,600	42,100
Tasmania	122,573	15,786	135,598	17,765
Northern Territory	23,270	2,292	29,049	2,368
Australian Capital Territory	57,132	4,052	68,591	3,963
Australia	4,162,064	431,200	4,668,909	469,742

(a) Unoccupied private dwellings only. Unoccupied non-private dwellings were not enumerated.

Occupied Dwellings

Details of occupied dwellings at the 1976 and 1981 Censuses are shown in the next table. As the categories of dwellings were revised for the 1981 Census, comparable statistics were not available separately for each category of the 1976 Census. For the first time in Queensland, the taking of the 1981 Census coincided with the school semester vacation. As a result, significant numbers of persons were absent from their usual place of residence on Census night and this is reflected in the level of occupancy of private dwellings. Urban Brisbane is defined in Chapter 4 and urban centres in Chapter 6.

The number of occupied private dwellings increased by 16.7 per cent between the 1976 and 1981 Censuses. The number of occupied non-private dwellings increased by 33.7 per cent.

The definitions of the categories of private dwellings used in the following tables are:

House—separate house, semi-detached house, and row/terrace house

Medium density—flats, home units, etc. up to and including three storeys

High density—flats, home units, etc. over three storeys

Mobile—caravans (excluding caravan parks), house boats, etc.

Other—improvised home, house or flat attached to shop, office, etc., and not stated.

OCCUPIED DWELLINGS BY CLASS: URBAN AND RURAL, QUEENSLAND

Class of dwelling	Census 1976	Census 1981			
		Urban		Rural	Total
		Brisbane	Other		
Private dwellings					
House	(a)	263,014	217,634	114,263	594,911
Medium density		37,002	36,906	1,586	75,494
High density		3,314	2,896	31	6,241
Mobile		296	978	3,831	5,105
Other		4,456	6,786	5,239	16,481
Total		598,140	308,082	124,950	698,232
Non-private dwellings		4,286	770	2,674	5,732
Total occupied dwellings		602,426	308,852	127,624	703,964

(a) The class of dwelling classification used in the 1981 Census is not comparable with that used in previous Censuses. For definition of terms see introduction.

The next table shows the number of persons enumerated in each class of dwelling at the 1976 and 1981 Censuses.

NUMBER OF INMATES BY CLASS OF DWELLING, QUEENSLAND

Class of dwelling	Census 1976	Census 1981			
	Total	Urban		Rural	Total
		Brisbane	Other		
Persons enumerated in					
Private dwellings					
House	(a)	820,716	683,392	400,160	1,904,268
Medium density		65,406	82,201	3,974	151,581
High density		5,537	6,778	74	12,389
Mobile		703	2,409	10,094	13,206
Other		12,150	19,771	17,046	48,967
Total	1,904,542	904,512	794,551	431,348	2,130,411
Non-private dwellings	129,323	38,290	78,419	40,997	157,706
Total in occupied dwellings ..	2,033,864	942,802	872,970	472,345	2,288,117
Persons enumerated elsewhere					
Campers-out, migratory	3,332	37	573	3,919	(b) 7,006
Total population	2,037,196	942,839	873,543	476,264	(b) 2,295,123

(a) The class of dwelling classification used in the 1981 Census is not comparable with that used in previous Censuses. For definition of terms see page 269. (b) Including 2,477 persons not allocated to an area.

At the 1981 Census 92.8 per cent of the enumerated population was in private dwellings, 6.9 per cent in non-private dwellings, and 0.3 per cent in transit or camping out. Corresponding percentages at the 1976 Census were 93.5, 6.3, and 0.2.

Unoccupied Private Dwellings

For private dwellings not occupied on the night of the Census, collectors were required to determine as many particulars as possible and to enter on the Census schedule the reason why the dwelling was unoccupied.

UNOCCUPIED PRIVATE DWELLINGS BY CLASS, QUEENSLAND

Class of dwelling	Census 1976	Census 1981			
	Total	Urban		Rural	Total
		Brisbane	Other		
House	(a)	17,425	24,246	19,128	60,799
Medium density		4,378	9,027	451	13,856
High density		674	2,032	4	2,710
Mobile and other		1,269	2,286	2,446	6,001
Total	62,686	23,746	37,591	22,029	83,366

(a) The class of dwelling classification used in the 1981 Census is not comparable with that used in previous Censuses. For definition of terms see page 269.

Unoccupied private dwellings comprised 10.6 per cent of all dwellings at the 1981 Census and was an increase of 33.0 per cent on the number recorded at the 1976 Census.

The next table shows the number of unoccupied private dwellings, and the reason for being unoccupied, at the 1976 and 1981 Censuses.

UNOCCUPIED PRIVATE DWELLINGS BY REASON FOR BEING UNOCCUPIED, QUEENSLAND

Reason for being unoccupied	Census 1976	Census 1981			
	Total	Urban		Rural	Total
		Brisbane	Other		
For sale or renting	11,072	3,961	6,691	1,831	12,483
New, awaiting occupancy	3,318	867	1,877	920	3,664
Vacant for repair etc.	2,018	996	926	774	2,696
Holiday home	12,142	270	7,755	5,439	13,464
Condemned for demolition	1,732	329	539	571	1,439
Resident temporarily absent	19,924	17,323 ^a	19,803	12,494	49,620
Other and not stated	12,480				
Total	62,686	23,746	37,591	22,029	83,366

Occupied Private Dwellings

Details of the number of rooms in occupied private dwellings are shown in the next table. The number of rooms includes kitchen and enclosed sleep-out, but excludes toilet, pantry, laundry, or store room. A combined lounge-dining room was counted as one room.

OCCUPIED PRIVATE DWELLINGS (a) BY NUMBER OF ROOMS, QUEENSLAND

Number of rooms per dwelling	Census 1976	Census 1981		
	Total	House	Other	Total
1	2,058	661	3,758	4,419
2	8,946	2,422	6,276	8,698
3	24,688	9,882	19,174	29,056
4	75,036	53,822	45,421	99,243
5	175,770	185,371	12,862	198,233
6	151,638	169,790	5,154	174,944
7	80,880	92,872	2,189	95,061
8 or more	63,288	74,787	2,118	76,905
Not stated	15,836	5,304	6,369	11,673
Total occupied private dwellings ..	598,140	594,911	103,321	698,232

(a) For definition of terms see page 269.

The next table shows the nature of occupancy of occupied private dwellings at the 1976 and 1981 Censuses.

OCCUPIED PRIVATE DWELLINGS BY NATURE OF OCCUPANCY, QUEENSLAND

Nature of occupancy	Census 1976	Census 1981			
	Total	Urban		Rural	Total
		Brisbane	Other		
Owner, purchaser by instalments	397,336	217,239	167,386	85,237	469,862
Tenant of Housing Commission	16,788	11,684	5,503	737	17,924
Other tenant	126,904	64,297	71,734	18,369	154,400
Other methods of occupancy and not stated	57,112	14,862	20,577	20,607	56,046
Total occupied private dwellings ..	598,140	308,082	265,200	124,950	698,232

The next table shows the number of registered motor vehicles which were garaged or parked at occupied private dwellings at the 1976 and 1981 Censuses.

OCCUPIED PRIVATE DWELLINGS BY MOTOR VEHICLES AT DWELLING, QUEENSLAND

Motor vehicles at dwelling	Census 1976	Census 1981			
	Total	Urban		Rural	Total
		Brisbane	Other		
Nil	85,634	47,405	31,990	7,903	87,298
1	276,328	132,074	121,792	44,889	298,755
2 or more	213,106	120,847	102,229	67,745	290,821
Not stated	23,072	7,756	9,189	4,413	21,358
Total occupied private dwellings ..	598,140	308,082	265,200	124,950	698,232

2 CONSTRUCTION

Supervision and Control of Building

Under the *Building Act* 1975–1981, prescribed standard building by-laws for Local Authorities in respect of the erection of buildings and other structures apply uniformly throughout the State.

The *Building Act* deals with almost every facet of building: site requirements, building height restrictions, structural provisions, room sizes and heights, light and ventilation, damp-proofing, fire resisting materials, etc. The provisions relating to all types of building are included in a general form in the schedule to the Act. In addition, Appendix 4 to the Act which came into force on 1 July 1982, contains design and construction details for conventional, single-family dwellings and outbuildings. The purpose of the Act is to ensure that adequate standards of building are maintained with regard to quality, safety, and the health of occupants. Before building operations are commenced, detailed plans and specifications for a proposed building, or for alterations or additions to an existing building, must be submitted to the appropriate Local Authority for approval. The Crown is also bound by the provisions of the Act.

Architects

All persons calling themselves architects have to be registered with the Board of Architects of Queensland, a body operating under the *Architects Act* 1962–1971. At 30 June 1983, there were 1,405 architects registered with the Board, of whom 1,098 had registered business addresses in Queensland and 307 had registered business addresses interstate or overseas. Any group or association of persons practising architecture as a body corporate must obtain the approval of the Board as an architectural company.

Registration of Builders

The *Builders' Registration and Home-owners' Protection Act* 1979–1982 requires all builders undertaking building activity of any consequence in Queensland to be registered with the Builders' Registration Board of Queensland. A builder may register under the Act as a general builder, as a house builder, or as both. The Act is intended to regulate the building industry and to protect the public against faulty workmanship and unscrupulous practices. Home-owners' protection is safeguarded by an insurance fund financed by registered house builders. An owner-builder may still construct a single dwelling house for his own use without being registered, provided he fulfils certain conditions prescribed by the Board.

Safety in Building Construction

Safety in building construction is covered by the *Construction Safety Act* 1971–1982 which contains provisions relating to the safety and welfare of persons engaged in construction work

and other work associated therewith, and of members of the public in respect of danger from such work. The Act is administered by the Department of Employment and Industrial Affairs.

Building Statistics

These statistics deal only with the construction of building structures. Construction, other than building, such as roads, bridges, dams, etc., is discussed under a separate heading later in this chapter.

The values shown for building statistics represent the estimated completion cost of new buildings and large alterations and additions to existing buildings. While the statistics provide an indication of trends in the building industry in the long term, it should be remembered that the value criteria used as a cut-off for inclusion of building jobs have been varied periodically to be consistent with the general escalation in building costs.

From 1974-75 the scope of the building collections covers all new dwellings (houses and other dwellings), new other buildings valued at \$10,000 and over, and alterations and additions (both to dwellings and other buildings) valued at \$10,000 and over.

Building Approvals

Statistics of building approvals are compiled from (i) permits issued by Local Authorities and (ii) contract work let and day-labour work approved by the Commonwealth and State Governments, Semi-government Authorities, and Local Authorities. Some approvals are issued for building projects which, for various reasons, are later deferred or abandoned altogether. Figures for commencements (see appropriate tables) will therefore generally be lower than the number of approvals issued, but the extent of the discrepancy will vary with economic conditions.

SUMMARY OF BUILDING APPROVALS, QUEENSLAND

Class of building		1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
New houses	No.	19,884	20,896	22,861	25,774	23,689	19,507
	\$m	516.7	568.7	688.9	900.0	980.3	831.3
New other dwellings	No.	5,117	7,385	8,407	13,252	14,434	7,636
	\$m	104.9	192.7	224.9	470.1	655.0	352.0
Total new dwellings	No.	25,001	28,281	31,268	39,026	38,123	27,143
	\$m	621.6	761.4	913.8	1,370.0	1,635.3	1,183.3
Alterations and additions to dwellings	\$m	17.4	17.6	24.9	32.4	46.3	51.0
Hotels etc.	\$m	13.8	17.4	40.9	61.0	137.0	61.2
Shops	\$m	75.5	84.1	83.6	72.6	123.8	97.8
Factories	\$m	50.0	59.1	243.6	102.4	154.0	67.4
Offices	\$m	26.7	50.7	34.3	63.0	180.9	111.0
Other business premises	\$m	33.3	35.0	43.7	65.7	82.3	93.7
Education	\$m	73.4	65.0	59.5	54.5	73.3	86.5
Religious	\$m	4.0	3.9	5.3	5.8	5.0	7.8
Health	\$m	103.9	18.7	27.8	28.9	33.8	59.4
Entertainment and recreation	\$m	22.2	49.9	53.0	36.4	35.5	52.3
Miscellaneous	\$m	24.0	57.1	53.7	57.5	84.1	92.3
Total other building	\$m	426.8	440.9	645.3	547.7	909.8	729.4
Total	\$m	1,065.8	1,219.9	1,584.0	1,950.2	2,591.5	1,963.8

The next table shows the number of houses approved according to the material of external walls. Where more than one type of material is used, the house is shown according to the predominant material used.

TYPES OF HOUSES APPROVED, QUEENSLAND

Year	Double-brick (a) (b)	Brick-veneer (a)	Timber	Fibre-cement	Other	Total
HOUSES APPROVED (No.)						
1977-78 ..	3,458	9,448	1,767	5,013	198	19,884
1978-79 ..	3,828	10,995	1,532	4,349	192	20,896
1979-80 ..	3,677	13,199	1,130	4,572	283	22,861
1980-81 ..	3,446	16,028	1,101	4,724	475	25,774
1981-82 ..	2,578	15,046	1,032	4,510	523	23,689
1982-83 ..	2,059	11,530	1,091	4,164	663	19,507
PROPORTION OF HOUSES APPROVED (%)						
1977-78 ..	17.4	47.5	8.9	25.2	1.0	100.0
1978-79 ..	18.3	52.6	7.3	20.8	1.0	100.0
1979-80 ..	16.1	57.7	4.9	20.0	1.3	100.0
1980-81 ..	13.4	62.2	4.3	18.3	1.8	100.0
1981-82 ..	10.9	63.5	4.4	19.0	2.2	100.0
1982-83 ..	10.6	59.1	5.6	21.3	3.4	100.0

(a) Including bricks or blocks of clay, concrete, or calcium silicate, concrete, and stone.

(b) Including concrete poured on site, prefabricated steel-reinforced concrete, and stone.

Building Activity Survey

To measure the extent of building work undertaken, rather than the extent of intentions to build (approvals), regular statistical collections have been undertaken to provide details of actual activity.

Up to 1979-80 statistics of building operations were compiled from returns obtained by a quarterly census of (i) private contractors, (ii) owner-builders, and (iii) Commonwealth, State, Local, and Semi-government Authorities.

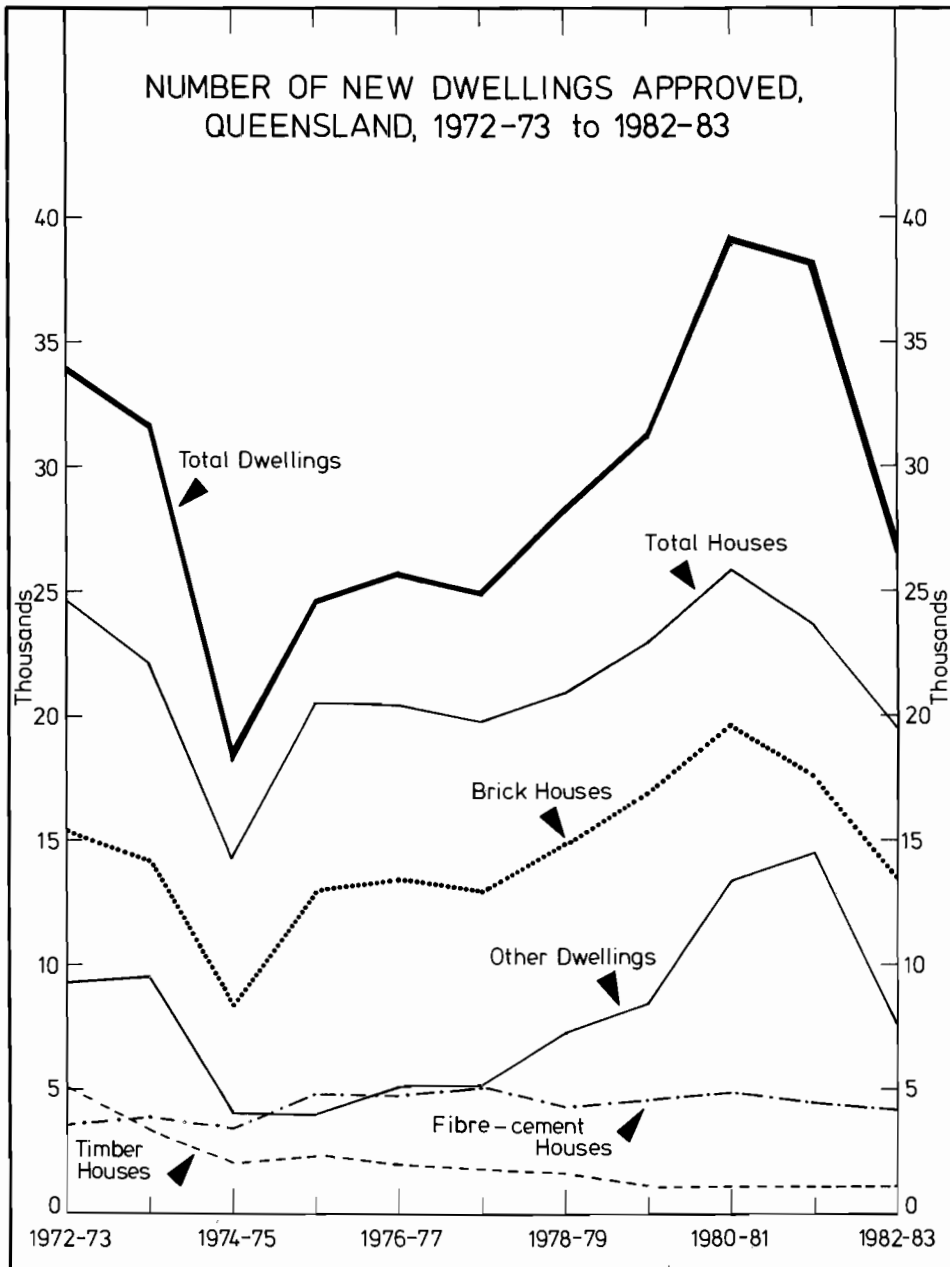
From the September quarter 1980 a new Building Activity Survey has been conducted on a sample basis for new house construction and alterations and additions to houses valued at \$10,000 or more. The population from which the sample is selected is all work included in the Building Approvals series. The sample survey provides information on private sector house building activity at the Australian and State levels only, and it is not possible to classify data by as many variables as previously. The collection methodology for other dwellings and other building, i.e. complete enumeration, remains virtually unchanged.

Dwellings are classified as either 'houses' or 'other dwellings'. 'Other dwellings' relate to self-contained dwelling units described as flats, home units, semi-detached cottages, villa units, town houses, etc.

Private or public ownership. A building is classified as 'private' or 'public' according to ownership at date of approval. 'Public' includes buildings erected for Commonwealth, State, Local, and Semi-government Authorities whether these buildings are for their own use or for rental or sale after completion.

Contractor-built houses are those erected under contract, or in anticipation of sale or rental. *Houses built by other than contract builders* are those erected by an owner (other than a recognised building contractor) or under his direction, without the services of a single contractor responsible for the whole job. Houses built by businesses (other than recognised building contractors) are also included in this category.

Up to the June quarter 1981 a building was regarded as having been 'commenced' when expenditure on building work was first reported by the builder. From the September quarter 1981 a commencement has been recorded if the value of work done to the end of a quarter (a) exceeds \$2,000 for house jobs, (b) exceeds \$5,000 for other dwelling and other building jobs or (c) the relevant approving authority reports a job as commenced. A job is regarded as



'completed' when it is reported as such or has been substantially completed and occupied and as 'under construction' at the end of a period if it has been commenced but has not been completed, and work on it has not been abandoned.

Class of building. A building is classified according to the function it is intended to serve. A building which is ancillary to other buildings, or forms part of a group of related buildings, is classified according to the function of the group as a whole.

Values. All values shown exclude the value of land and landscaping. Values for work approved, commenced, and under construction are the estimated values of the building jobs when completed. *Value of work completed* represents the actual value of the whole job when completed, including any site preparation costs. *Value of building work done* represents the estimated value of the building work actually carried out during the period.

SUMMARY OF BUILDING STATISTICS, QUEENSLAND
(\$m)

Year	New dwellings		Shops	Factories	Offices	Educational	Other (a)	Total (b)
	Houses	Other						
APPROVED								
1977-78 ..	516.7	104.9	75.5	50.0	26.7	73.4	201.2	1,065.8
1978-79 ..	568.7	192.7	84.1	59.1	50.7	65.0	181.9	1,219.9
1979-80 ..	688.9	224.9	83.6	243.6	34.3	59.5	224.4	1,584.0
1980-81 ..	900.0	470.1	72.6	102.4	63.0	54.5	255.2	1,950.2
1981-82 ..	980.3	655.0	123.8	154.0	180.9	73.3	377.8	2,591.5
1982-83 ..	831.3	352.0	97.8	67.4	111.0	86.5	366.8	1,963.8
COMMENCED								
1977-78 ..	519.0	114.3	65.6	46.0	49.6	74.1	199.5	1,089.8
1978-79 ..	574.0	169.2	108.6	50.4	44.4	76.4	233.5	1,276.9
1979-80 ..	717.3	248.6	86.4	285.3	54.9	63.1	229.7	1,708.8
1980-81 ..	866.4	490.3	83.6	89.8	59.2	65.5	284.6	1,970.8
1981-82 ..	1,000.1	730.3	148.1	115.0	146.2	72.3	360.6	2,614.5
1982-83 ..	831.3	286.2	87.7	97.1	166.0	79.0	339.6	1,933.0
COMPLETED								
1977-78 ..	521.4	103.5	81.0	47.7	88.0	78.7	233.3	1,175.3
1978-79 ..	560.0	143.7	84.5	40.2	71.7	69.9	183.2	1,172.1
1979-80 ..	706.9	191.7	92.6	65.4	44.3	76.0	251.7	1,450.4
1980-81 ..	775.5	263.0	90.8	83.4	56.5	57.2	209.0	1,566.4
1981-82 ..	996.5	547.1	105.9	128.7	79.1	68.2	383.4	2,348.2
1982-83 ..	872.6	534.2	124.8	241.7	109.4	87.1	341.0	2,354.6
UNDER CONSTRUCTION AT END OF YEAR								
1977-78 ..	146.6	65.9	33.4	30.5	54.5	51.3	193.2	577.3
1978-79 ..	167.5	94.0	61.7	38.8	32.8	58.3	254.0	710.5
1979-80 ..	188.6	154.0	47.9	257.7	45.7	45.1	229.1	973.5
1980-81 ..	309.9	420.5	52.0	279.8	53.2	55.4	355.0	1,534.7
1981-82 ..	314.2	566.5	91.8	264.6	122.0	58.5	313.2	1,741.8
1982-83 ..	260.3	322.0	70.5	122.2	186.9	51.8	346.3	1,372.0
VALUE OF WORK DONE								
1977-78 ..	524.2	106.4	67.6	51.4	65.3	72.7	178.8	1,088.2
1978-79 ..	570.4	151.4	96.7	47.4	52.1	69.8	196.9	1,204.5
1979-80 ..	717.6	223.1	103.1	73.0	54.5	73.9	266.2	1,534.4
1980-81 ..	840.0	375.6	86.1	175.4	57.1	59.1	286.9	1,911.6
1981-82 ..	1,006.0	636.4	126.3	194.3	93.0	71.8	356.9	2,525.8
1982-83 ..	850.5	426.8	122.6	116.9	161.4	80.4	365.2	2,167.7

(a) Including hotels etc., other business premises, religious, health, entertainment and recreation, and miscellaneous building.
(b) Including alterations and additions to dwellings, not shown separately.

The total value of building work done has increased by 99 per cent over the six years to 1982-83. Because of increases in building costs over the period, however, the variation in real activity should not be assessed by means of value comparisons alone.

The next table shows the number of dwellings commenced and completed by class of ownership.

NUMBERS OF NEW DWELLINGS, QUEENSLAND

Year	Private ownership			Public ownership (a)		Total		
	Contractor-built houses	Other houses	Other dwellings	Houses	Other dwellings	Houses	Other dwellings	All dwellings
COMMENCED								
1977-78 ..	14,881	2,675	4,590	1,466	200	19,022	4,790	23,812
1978-79 ..	16,093	2,931	5,432	459	455	19,483	5,887	25,370
1979-80 ..	18,430	3,690	7,348	347	390	22,467	7,738	30,205
1980-81 ..	18,550	4,760	11,028	514	438	23,820	11,466	35,280
1981-82 ..	18,220	4,490	12,511	522	457	23,240	12,968	36,210
1982-83 ..	13,370	4,050	5,616	912	689	18,330	6,305	24,630
COMPLETED								
1977-78 ..	14,807	2,586	4,573	1,787	188	19,180	4,761	23,941
1978-79 ..	15,548	2,804	4,838	830	326	19,182	5,164	24,346
1979-80 ..	18,485	3,598	6,371	401	328	22,484	6,699	29,183
1980-81 ..	17,610	4,150	7,299	409	490	22,170	7,789	29,960
1981-82 ..	18,680	4,860	11,446	532	436	24,070	11,882	35,950
1982-83 ..	14,710	4,020	9,096	642	591	19,370	9,687	29,060

(a) Commonwealth, State, Local, and Semi-government Authorities.

Dwelling Unit Commencements Reported by Approving Authorities

In order to provide a finer level of geographic disaggregation than the State level, an additional series of dwelling commencements has been compiled since 1 July 1980 from reports provided principally by local and other government authorities. As there are differences in data sources, collection methodologies, and the timing of notification of these commencements from those jobs reported in the Building Activity Survey, care should be exercised in comparing the data between the series.

Details of the number of new dwelling units reported by approving authorities as commenced during 1982-83 in each Statistical Division and Brisbane City, together with those commenced in Statistical Districts, are shown in the next table.

DWELLING UNIT COMMENCEMENTS REPORTED BY APPROVING AUTHORITIES, QUEENSLAND, 1982-83

Statistical Division or District	New dwelling units			Statistical Division or District	New dwelling units		
	Houses	Other	Total		Houses	Other	Total
Brisbane Statistical Division	6,598	1,823	8,421	Far North Statistical Division ..	1,233	532	1,765
<i>Brisbane City</i>	1,711	962	2,673	North-West Statistical Division ..	105	20	125
<i>Rest of Brisbane Statistical Division</i>	4,887	861	5,748	Queensland	17,559	5,904	23,463
Moreton Statistical Division	3,746	1,815	5,561				
Wide Bay-Burnett Statistical Division	1,294	201	1,495	Gold Coast Statistical District (a) ..	1,382	1,521	2,903
Darling Downs Statistical Division ..	838	296	1,134	Sunshine Coast Statistical District ..	674	207	881
South-West Statistical Division	47	14	61	Bundaberg Statistical District	191	91	282
Fitzroy Statistical Division	1,241	387	1,628	Rockhampton Statistical District ..	296	187	483
Central-West Statistical Division	14	4	18	Mackay Statistical District	411	277	688
Mackay Statistical Division	1,268	439	1,707	Townsville Statistical District	640	279	919
Northern Statistical Division	1,175	373	1,548	Cairns Statistical District	615	395	1,010

(a) The part in Queensland only.

Construction (Other Than Building) Statistics

Collection of statistics covering the construction of roadways, bridges, dams, electricity generation and transmission lines, harbours, railways, etc. commenced on a regular basis in Australia in 1973. The statistics relate to work by private contractors on construction prime contracts valued at \$100,000 or more, inclusive of all associated sub-contract work performed

for the prime contractor. Alterations and additions undertaken as prime contracts valued at \$100,000 or more are included in the statistics. Repairs and maintenance contracts, construction undertaken by government authorities involving their own work forces, and construction on their own account by enterprises in the private sector, are excluded.

The series gives details of construction (other than building) activity in terms of prime contracts only. Prime contracts are defined as contracts where the contractor is legally liable to the owner of the project. Prime contracts are classified by *type of construction* according to the goods or service provided. Where a contract covers more than one type of construction, e.g. a contract for road and bridge work, the contract is classified to the component with the greatest value.

For a more detailed account of the coverage and definitions used in construction (other than building) statistics see page 539 of the 1977 Year Book.

SUMMARY OF CONSTRUCTION (OTHER THAN BUILDING) STATISTICS, QUEENSLAND (\$m)

Year	Roads	Bridges	Dams (a)	Sewer systems	Electricity generation and transmission	Harbours	Other heavy industrial plant etc.	Other (b)	Total
COMMENCED									
1977-78 ..	36.7	11.8	30.6	22.3	90.9	20.2	117.5	35.1	365.1
1978-79 ..	29.6	14.3	18.8	15.8	22.7	18.3	70.4	31.4	221.7
1979-80 ..	74.0	11.2	8.8	14.6	41.4	19.8	80.7	64.5	315.0
1980-81 ..	84.8	71.9	68.9	12.2	217.9	127.0	192.1	116.5	891.3
1981-82 ..	137.3	18.5	40.2	11.2	58.4	46.9	143.6	132.2	588.3
1982-83 ..	188.6	19.8	31.2	n.p.	155.9	n.p.	127.9	146.1	689.2
COMPLETED									
1977-78 ..	47.1	12.4	16.4	35.0	24.5	10.7	26.2	14.3	186.7
1978-79 ..	21.7	26.7	21.3	25.3	47.9	35.2	58.4	34.8	271.3
1979-80 ..	49.2	29.1	26.3	11.3	141.0	14.9	146.1	51.0	469.0
1980-81 ..	96.2	19.8	14.4	18.5	34.4	19.9	66.2	51.1	320.6
1981-82 ..	102.2	11.8	17.3	13.9	116.0	18.3	129.8	92.4	501.8
1982-83 ..	183.5	21.9	63.1	n.p.	131.8	n.p.	169.3	177.8	857.9
UNDER CONSTRUCTION AT END OF YEAR									
1977-78 ..	24.5	37.4	29.2	23.3	302.7	47.2	122.6	40.9	627.8
1978-79 ..	27.8	19.5	36.8	13.8	297.4	35.8	159.9	43.9	634.9
1979-80 ..	51.3	16.0	11.0	14.6	179.5	26.3	103.6	95.2	497.6
1980-81 ..	43.8	70.1	67.0	9.4	445.6	136.8	255.6	165.8	1,194.0
1981-82 ..	89.7	77.5	120.7	6.7	437.8	189.1	286.8	220.7	1,428.9
1982-83 ..	104.6	86.3	113.8	7.8	553.6	128.1	317.0	225.0	1,536.3
WORK DONE DURING YEAR									
1977-78 ..	37.8	19.2	19.5	23.7	49.9	26.1	60.7	29.0	266.0
1978-79 ..	23.9	18.6	32.9	22.5	94.2	27.5	94.1	33.5	347.2
1979-80 ..	59.0	19.3	12.2	15.0	55.4	15.7	76.3	84.8	337.7
1980-81 ..	95.6	18.9	19.2	14.2	95.3	23.7	125.4	82.1	474.4
1981-82 ..	136.9	26.2	63.9	13.7	123.0	107.6	174.4	149.2	795.0
1982-83 ..	174.4	35.0	90.4	15.7	221.1	91.5	262.2	202.3	1,092.6
WORK YET TO BE DONE AT END OF YEAR									
1977-78 ..	12.7	12.4	18.6	10.8	128.0	17.8	71.7	19.3	291.2
1978-79 ..	14.3	6.2	13.8	5.1	78.5	13.0	72.0	23.4	226.5
1979-80 ..	28.1	4.5	4.6	5.4	52.0	14.2	71.4	40.0	220.2
1980-81 ..	20.9	59.6	55.8	4.0	256.8	120.9	160.5	88.1	766.6
1981-82 ..	32.2	52.5	62.9	1.8	242.2	76.7	147.5	85.5	701.4
1982-83 ..	57.0	48.3	28.7	2.2	268.6	19.6	84.9	65.5	574.7

(a) Including water supply pipelines and water distribution systems, and highway lighting, telecommunications, and miscellaneous.

(b) Comprises railways and tramways, pipelines for oil, gas, etc., street

In relation to Australia for the year 1982-83, Queensland's proportion of total work commenced was 30 per cent, total work completed, 27 per cent, and work done during year, 25 per cent.

3 FINANCE FOR HOUSING

The majority of dwellings built or purchased each year for owner occupation are financed in part with funds borrowed, usually on the security of the property involved.

From October 1975, the Australian Bureau of Statistics has collected comparable details from significant lenders providing secured housing finance for owner occupation. Descriptions of the scope, coverage, and definitions used in the compilation of these statistics appear in the July 1983 issue of the ABS publication *Housing Finance for Owner Occupation* (Catalogue No. 5609.0).

The following table gives details of loans approved by significant lenders for the construction and purchase of dwellings in Queensland.

HOUSING FINANCE FOR OWNER OCCUPATION, QUEENSLAND

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Loans approved						
Savings banks	280,508	294,688	310,321	336,481	365,846	459,750
Trading banks	82,342	109,498	120,381	148,181	159,225	191,773
Building societies						
Permanent	149,769	315,818	343,596	334,139	315,663	299,947
Terminating	12,413	6,203	4,725	4,172	1,275	1,453
Finance companies	76,300	79,142	77,738	133,779	117,210	85,517
Government	52,222	50,754	72,384	76,580	94,070	108,460
Other	10,718	12,773	14,716	24,345	19,972	20,394
Total	664,272	868,876	943,861	1,057,677	1,073,261	1,167,294
	No.	No.	No.	No.	No.	No.
Purpose of loan						
Construction of dwellings	7,217	8,774	9,048	9,073	8,819	8,300
Purchase of newly-erected dwellings	6,355	6,464	6,422	6,128	5,053	3,890
Purchase of established dwellings ..	20,886	25,096	26,466	28,799	26,950	26,471
Total	34,458	40,334	41,936	44,000	40,822	38,661

Private Finance for Housing

Savings banks lend funds for housing to both individuals and to building societies and also provide finance for alterations and additions to existing dwellings.

SAVINGS BANKS HOUSING FINANCE, QUEENSLAND

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Loans to individuals						
Loans approved						
Dwellings not previously occupied (a) .. No.	6,041	6,095	5,971	5,860	5,592	5,373
Dwellings previously occupied (a) .. No.	112,679	124,786	126,868	128,885	134,680	150,892
Alterations and additions \$'000	167,829	169,902	183,453	207,596	231,166	308,858
Total	6,220	5,944	4,603	3,808	3,240	6,513
Undrawn commitments at 30 June .. \$'000	286,728	300,632	314,924	340,289	369,086	466,263
Balances outstanding at 30 June (b) .. \$'000	45,623	54,688	50,478	68,589	65,498	78,883
Loans to building societies						
Balances outstanding at 30 June \$'000	955,986	1,090,681	1,231,437	1,343,501	1,536,386	1,795,798
Balances outstanding at 30 June \$'000	14,702	14,643	14,116	12,992	12,151	11,604

(a) Second mortgage financing is excluded from the number of dwelling units but included in the value of loans approved.

(b) Including interest debited to loan accounts.

The trading banks make advances for housing, dependent on the credit status of the borrower. Figures for loans approved for owner occupation are included in the table, Housing Finance for Owner Occupation.

Under the *Building Societies Act* 1886-1976, any 25 or more persons may form a building society, either terminating or permanent, with the object of assisting its members or others to acquire freehold or leasehold property.

Details of the financial operations of permanent building societies are shown in the next table. Permanent building societies raise funds primarily from the small investor who takes shares or makes interest-bearing deposits. Funds are lent to the general public for building or buying dwellings secured by first mortgage.

PERMANENT BUILDING SOCIETIES (a), QUEENSLAND

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Loans approved for						
Dwellings not previously occupied .. No.	1,910	3,753	3,565	3,186	1,729	2,095
\$'000	50,753	107,833	112,897	108,565	104,243	84,709
Dwellings previously occupied .. No.	4,350	8,433	8,717	7,942	6,267	5,984
\$'000	99,016	207,985	230,699	225,574	211,420	215,238
Other (b) \$'000	6,788	19,179	28,053	29,379	22,332	29,150
Total \$'000	156,557	334,997	371,649	363,518	337,995	329,097
Loans advanced on mortgage \$'000	151,944	298,366	362,334	354,856	327,621	301,504
Balances at 30 June						
Loans approved but not advanced .. \$'000	14,451	39,722	35,626	26,989	22,255	38,186
Principal owing on mortgages \$'000	788,275	960,124	1,162,418	1,282,931	1,371,061	1,443,162
Paid-up share capital of societies \$'000	828,221	967,408	991,874	1,103,410	1,107,016	1,194,210
Unsecured borrowings by societies \$'000	41,480	121,805	337,328	354,938	443,797	568,380
Secured borrowings by societies \$'000	38,150	14,420	9,347	9,828	6,706	16,038

(a) Societies whose rules do not specify that they are to terminate on a specific date or event. educational bodies for institutional housing and loans for alterations and additions.

(b) Including loans to religious and

Under the *Co-operative Housing Societies Act* 1958-1974, 12 or more persons may form a terminating society whose operations are confined to advancing money to members, subject to eligibility under a means test, for the erection of new dwellings or the purchase of dwellings up to 30 years old, or for the conversion of approved dwellings into flats. These societies finance their advances to members through Government advances and loans from other sources such as banks and insurance companies. Most of the latter are guaranteed by the State Government. Figures for housing loans approved by co-operative housing societies and other terminating societies are included in the table, Housing Finance for Owner Occupation.

Finance companies also provide housing loans. In general, the companies provide loans to their customers if their credit worthiness falls within the standard determined by the individual companies. The total amount financed for housing in Queensland during 1982-83 was \$456.7m, and the balance outstanding at 30 June 1983 was \$1,292.0m. These figures include loans other than those for owner occupation and therefore cannot be compared with the approved loans figure contained in the table, Housing Finance for Owner Occupation.

Life insurance companies make housing loans which are normally collaterally secured by a life insurance policy. Figures for housing loans approved for owner occupation are included in 'other' in the table, Housing Finance for Owner Occupation. Total housing loans advanced (including loans other than for owner occupation) amounted to \$13.6m in 1982-83.

Other private sources of housing finance include credit unions, superannuation and other trust funds, private investment companies, mortgage management companies, friendly societies, and solicitors' trust funds.

Government Finance for Housing

Government finance for housing is provided through the Queensland Housing Commission which was established under *The State Housing Act of 1945*. Loans and grants from the Commonwealth and State Governments and recycling funds within the Commission are its major source of finance. The Commission shares payments from the Commonwealth Government with certain approved housing institutions, mainly co-operative housing societies.

The Commonwealth Government also conducts a Defence Service Homes scheme for the housing of eligible ex-servicemen, a scheme for the insurance of housing loans, and a scheme to assist home purchasers.

The Queensland Housing Commission is empowered to build and let houses and flats, provide housing loans, sell houses, and acquire and develop land, in addition to administering and acting as the construction authority for the various Commonwealth-State Housing Agreements.

In August 1982, the Commission introduced two new schemes to finance home ownership, the Interest Subsidy and Commercial Schemes. The Interest Subsidy Scheme assists modest income earners. Purchasers are required to pay 25 per cent of their gross income as housing interest while the Scheme subsidises the shortfall between this amount and the level of commercial interest. The Commercial Scheme was introduced to supplement the capacity of commercial lending institutions to provide finance for home ownership. It provides loan finance at commercial interest rates for borrowers who do not qualify under the Interest Subsidy Scheme.

No new applications under the previous home finance scheme were accepted by the Commission after August 1982. Under that Scheme, an eligible person could obtain a loan to a maximum of \$30,000 for the erection or purchase of a dwelling. Interest was chargeable at 8 per cent and repayments made over periods up to 45 years.

A new system of income-based rents for all tenants of rental housing was introduced in December 1982. At the same time, the formula for calculating income-based rents, which had remained basically unaltered since the 1945 Commonwealth-State Housing Agreement, was amended to remove inequities.

Under the *Housing Assistance Act 1981* a five-year Housing Agreement was executed with the States and the Northern Territory covering the period 1981-82 to 1985-86. The Commonwealth is to provide base financial assistance amounting to \$200m in each year of the Agreement and may provide additional financial assistance each year depending on budgetary and other circumstances. In 1982-83 an amount of \$318.2m was provided to the States, of which Queensland received loans of \$15.1m and grants totalling \$26.0m.

Loans are repayable over 53 years at a concessional fixed rate of interest of 4.5 per cent a year. Of the \$26.0m in grants provided to Queensland in 1982-83, \$5.1m was for pensioner housing, \$6.6m for Aborigines in need of rental housing assistance, \$13.8m for other persons eligible for rental housing assistance, and \$0.4m for other housing assistance. Details of previous Agreements are provided in earlier editions of the *Year Book*.

Since 1956-57 the Commonwealth Government has made loans available to the States for the erection of dwellings for serving members of the Defence Forces. The present arrangements are embodied in the Commonwealth-State Housing Agreement (Servicemen) which provided the States with \$8.3m in 1982-83, of which Queensland received \$2.4m.

The housing transactions administered by the Queensland Housing Commission are recorded in the Queensland Housing Commission Fund and the Home Purchase Assistance Account. The major transactions of the Queensland Housing Commission Fund during 1982-83 were: loan raisings, \$19.8m; rents, \$56.2m; redemption by borrowers, \$20.2m; interest received,

\$16.6m; Commonwealth grants, \$31.5m; sales of properties, \$5.3m; erection of dwellings and land purchases, \$56.6m; interest paid, \$24.0m; advances to borrowers and purchasers, \$40.3m; and maintenance provision, \$18.5m. The major transactions of the Home Purchase Assistance Account during 1982-83 were: loan raisings, \$21.4m; redemption by borrowers, \$10.1m; interest received, \$12.1m; loans to borrowers and societies, \$34.6m; and interest paid, \$7.3m.

Under the *Defence Service Homes Act* 1918 the Commonwealth Government provides low interest housing loans to eligible persons, mainly ex-servicemen and women. The maximum amount of loan which may be granted is \$25,000, with a repayment period of 32 years. The first \$12,000 is available to borrowers at an annual interest rate of $3\frac{1}{2}$ per cent, the next \$3,000 at $7\frac{1}{4}$ per cent, and the remaining \$10,000 at 10 per cent. During 1982-83, \$34.4m was provided to finance the acquisition and alteration of dwellings in Queensland.

Home Deposit Assistance Scheme

Grants under the Home Deposit Assistance Scheme are payable to eligible persons at the rate of \$1 for each \$1 saved for the purchase or construction of a first home that was contracted for on or between 18 March 1982 and 30 September 1983. A maximum basic grant of \$2,500 is payable in respect of savings held in an acceptable form for the two years prior to the contract date. The savings requirement has been waived for homes contracted for in August and September 1983. In addition to the basic grant, the Scheme provides for a bonus of \$500 for families with one dependent child and \$1,000 for families with two or more dependent children.

In Queensland during 1982-83, 13,360 grants amounting to \$24.7m were approved under the provisions of this Scheme and its predecessor, the Home Savings Grant Scheme.

First Home Owners Scheme

The First Home Owners Scheme, which replaced the Home Deposit Assistance Scheme, applies to the acquisition of a first home that is contracted for on or after 1 October 1983.

Benefits are payable subject to a family income test but no savings test applies. Recipients may elect to receive a subsidy towards mortgage repayments over five years or a lump sum payment in the first year with reduced subsidy payments over the first five years of home ownership. The maximum subsidy payable is \$7,000 for home buyers with two or more dependent children, \$6,500 for those with one dependent child, or \$5,000 for those without dependent children.

Housing Loans Insurance Scheme

The Housing Loans Insurance Corporation (H.L.I.C.) functions under the Commonwealth Government *Housing Loans Insurance Act* 1965 to insure approved lenders against losses arising from the making of housing loans. The Corporation commenced operation in Queensland in 1966.

The activities of the H.L.I.C. were confined to the insurance of loans for owner-occupied housing until June 1977. Since then the legislation has been progressively amended and now the Corporation also insures loans for the purchase of land for home construction, loans for rental housing, and loans for land development and the construction of housing estates. In September 1983 the Charter of the H.L.I.C. was further widened to permit the insurance of loans for the construction and purchase of non-residential buildings.

Loans may be insured under full cover or partial cover. A claim is paid only where loss follows physical damage to the property.

The only figures available separately for Queensland are in relation to high ratio home ownership loans of more than 75 per cent of valuation and loans of less than \$100,000 covering rental properties and land purchase which are insured under full cover. There were 3,690 of these loans insured in Queensland in 1982-83 for a total value of \$143.7m.

In addition, the State Government offers indemnities against loss to co-operative housing societies who receive their funds from private lending institutions.

Housing Costs

There are some statistics available which indicate trends in the costs of housing and house building. For details of costs of building see Section 2 of this chapter.

The Consumer Price Index measures price movements, in the six State Capital Cities, Canberra, and in Darwin, of commodities and services representing a high proportion of the aggregate expenditure of wage-earner households. Housing is one of the eight main groups comprising the index, and is comprised of the costs of home ownership and allowances for private and government house and private flat rents. The costs of home ownership cover house price, repairs and maintenance, and local government rates and charges but do not include the cost of land or interest charges on house purchase. Details of the housing group for Brisbane are shown in Chapter 21, Prices, Section 2.

The yearly average of the housing group index for Brisbane rose from 113.0 for the year ended 30 June 1982 to 128.0 for the year ended 30 June 1983, an increase of 13.3 per cent, compared with 10.5 per cent for the weighted average of the eight Capital Cities.

The Wholesale Price Index of Materials Used in House Building measures changes in prices of selected materials used in the construction of houses. A description of the composition of the index and details of the ten group indexes and the combined all groups index for Brisbane are given in Chapter 21, Prices, Section 5. On the base 1966-67 = 100.0, the all groups index for Brisbane increased from 407.2 for the year ended 30 June 1982 to 448.0 for the year ended 30 June 1983. This represented an increase of 10.1 per cent compared with 10.0 per cent for the weighted average of the six State Capital Cities.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Census of Population and Housing (2405.3 and 2406.3) (*irregular*)

Building Approvals (8731.3) (*monthly*)

Building Approvals: Small Area Statistics (8733.3) (*annual*)

Building Activity (8752.3) (*quarterly*)

Dwellings Unit Commencements Reported by Approving Authorities (8741.3) (*quarterly*)

Central Office Publications

Census of Population and Housing, 1981

Persons and Dwellings in Local Government Areas and Urban Centres (2403.0)

Summary Characteristics of Persons and Dwellings (2437.0)

Cross-classified Characteristics of Persons and Dwellings (2446.0)

Housing Finance for Owner Occupation (5609.0) (*monthly*)

Building Approvals (8731.0) (*monthly*)

Building Activity (8752.0) (*quarterly*)

Construction (Other Than Building) Operations (8761.0) (*quarterly*)

Other Publications

Annual reports of the Queensland Housing Commission

Chapter 16

AGRICULTURAL INDUSTRIES

1 GENERAL

Predominance of the agricultural and mining industries has been a feature of the economy of Queensland from the earliest days of settlement, and these industries have been major contributors to the State's income from exports. Despite the rapid development of manufacturing industry in recent years to a level approximating that of the agricultural industries, by far the greater part of exports from Queensland is still the product of the agricultural and mining industries.

This chapter deals with the activities of the agricultural industries. For details of the disposals of the products of these industries see Chapter 20, Marketing. Details of mining, forestry, and fisheries are shown in Chapter 17, Mining, Forestry, and Fisheries.

The estimated total value of agricultural commodity production was \$2,381.3m in 1982-83, a decline of \$231.4m on the record 1981-82 total of \$2,612.7m. Decreases of \$193.3m and \$44.3m were recorded in the values of crops and livestock slaughterings and disposals, respectively, while livestock products increased by \$6.2m. The main decreases were: wheat, \$101.8m; sugar cane, \$88.4m; cattle slaughterings and disposals, \$53.8m; peanuts, \$19.0m; wool, \$14.1m; and barley, \$11.6m. The most significant increases were: vegetables, \$28.4m; and dairying, \$14.2m.

The gross values of production in the main divisions of the agricultural industries in 1982-83 were: crops, \$1,279.0m; livestock disposals, \$788.0m; and livestock products, \$314.3m.

The main items of crop production usually are sugar cane, grain sorghum, wheat, other grain crops, hay, tobacco, peanuts, pineapples, apples, bananas, other fruits, potatoes, and tomatoes. In recent years sunflower, soybeans, and cotton have also become prominent.

2 AGRICULTURAL ESTABLISHMENTS

Economic Units

To provide economic and structural data in addition to commodity data, a new statistical framework was developed within the agricultural sector in 1974. While the agricultural holding is the basic unit used for the collection of commodity data, the new economic structure comprises

a group-enterprise/establishment hierarchy conceptually similar to and compatible with that used in the compilation of manufacturing, mining, and other economic statistics. The basic statistical unit in this new framework is the establishment which generally coincides with the holding unit.

Detailed information on the development of the new statistical framework is given in the ABS publication *Agricultural Sector, Australia, Structure of Operating Units* (Catalogue No. 7102.0).

Industry Classification

Establishments are first broadly classified to industry such as 'Agriculture' in the case of rural activity, thence to industry group, and subsequently to industry class such as cereal grains, meat cattle, sugar cane, etc. as defined in the Australian Standard Industrial Classification. The industry class is determined by applying the average unit value to the commodity data to derive an estimated 'value of agricultural operations' for each establishment. Establishments are then typed to the predominant activity according to the estimated value of operations (e.g. cereal grain, meat cattle, sugar cane).

It should be noted that there are differences in concept between estimated 'value of agricultural operations' mentioned in this section and 'gross values' of production mentioned elsewhere in the *Year Book*.

Value of Operations

The numbers of agricultural establishments in Queensland classified by industry class and estimated value of operations, are shown in the following table.

AGRICULTURAL ESTABLISHMENTS: NUMBER BY VALUE OF OPERATIONS, QUEENSLAND, 1982-83

Industry class	Value of operations (\$'000)							Total
	3-9	10-19	20-29	30-49	50-99	100-199	200 and over	
Cereal grains and oilseeds	242	390	362	676	992	505	233	3,400
Sheep-cereal grains ..	4	12	21	65	121	99	36	358
Meat cattle-cereal grains	210	346	279	416	518	267	95	2,131
Sheep-meat cattle ..	42	73	53	112	293	240	84	897
Sheep	56	115	98	210	449	280	88	1,296
Meat cattle	3,062	1,769	916	1,093	1,245	758	406	9,249
Milk cattle	89	244	424	967	930	137	6	2,797
Pigs	71	107	97	128	214	147	70	834
Poultry	6	12	10	35	95	67	70	295
Fruit, including grapes ..	401	435	268	332	361	153	79	2,029
Potatoes	6	10	13	25	76	73	49	252
Other vegetables ..	159	196	138	177	243	160	147	1,220
Sugar cane	12	36	83	484	2,560	1,922	582	5,679
Peanuts	12	38	54	118	175	66	15	478
Tobacco	1	1	4	42	294	78	6	426
Other agriculture ..	552	335	203	253	182	124	105	1,754
Total	4,925	4,119	3,023	5,133	8,748	5,076	2,071	33,095

3 AGRICULTURAL HOLDINGS

Number and Size of Agricultural Holdings

The diverse agricultural industries of Queensland were carried on, during 1982-83, on 34,403 holdings, which had a total area of 155,915,000 hectares. The number of agricultural

holdings is slightly more than the number of agricultural establishments reported in the preceding part of this chapter because there are small numbers of holdings where the non-farm business activity predominates and this precludes them from being industry classified as agricultural establishments. The distribution of holdings in statistical divisions, classified according to area size at 31 March 1983, is shown in the next table.

AGRICULTURAL HOLDINGS BY AREA SIZE, QUEENSLAND, AT 31 MARCH 1983

Statistical Division	Size of holding (hectares)									Total
	Under 10	10-19	20-49	50-99	100-199	200-499	500-1,999	2,000-19,999	20,000 and over	
Moreton (a) ..	899	456	1,256	1,289	1,175	868	358	67	—	6,368
Wide Bay-Burnett ..	114	140	597	1,001	1,230	1,379	1,005	443	5	5,914
Darling Downs ..	148	161	446	760	1,350	2,275	1,885	1,006	19	8,050
South-West ..	13	1	6	14	24	77	347	1,064	363	1,909
Fitzroy ..	54	43	113	154	287	571	805	1,009	99	3,135
Central-West ..	—	1	1	—	2	3	18	479	280	784
Mackay ..	14	7	200	510	532	390	169	339	80	2,241
Northern ..	49	57	451	614	361	199	103	207	168	2,209
Far North ..	71	68	732	1,089	674	311	69	78	163	3,255
North-West ..	4	—	—	—	—	1	9	266	258	538
Total Queensland	1,366	934	3,802	5,431	5,635	6,074	4,768	4,958	1,435	34,403

(a) Including Brisbane Statistical Division.

Of the 1,366 holdings under 10 hectares, 900 were under 5 hectares and of these 565 were in Brisbane and Moreton Divisions. The grouping 20,000 hectares and over included 465 holdings of 50,000 hectares and more, the majority of which were situated in the Divisions of North-West (114), Far North (105), Central-West (94), and South-West (79).

The average sizes of holdings in Divisions were: Brisbane and Moreton, 178 hectares; Wide Bay-Burnett, 662; Darling Downs, 1,002; Mackay, 2,843; Fitzroy, 3,425; Northern, 4,269; and Far North, 6,443. Average sizes in the western pastoral divisions were South-West, 16,139 hectares; Central-West, 44,072; and North-West, 55,623.

Growers of Crops

The next table shows the numbers of growers of some of the main crops during the year under review.

GROWERS OF MAIN CROPS, QUEENSLAND, 1982-83

Statistical Division	Sugar cane	Wheat	Maize	Grain sorghum	Tobacco	Pineapples	Bananas	Potatoes	Tomatoes
Moreton (a) ..	240	232	195	381	32	294	199	376	216
Wide Bay-Burnett ..	1,238	422	574	827	17	159	26	33	103
Darling Downs ..	—	2,622	461	2,559	14	—	2	29	143
South-West ..	—	317	4	102	—	—	—	2	1
Fitzroy ..	—	450	30	853	—	76	9	6	32
Central-West ..	—	—	—	1	—	—	—	—	—
Mackay ..	1,513	19	5	127	—	4	4	2	6
Northern ..	1,334	1	23	40	1	8	5	12	96
Far North ..	1,444	4	171	31	371	18	137	55	22
North-West ..	—	—	1	—	—	1	1	1	—
Total Queensland	5,769	4,067	1,464	4,921	435	560	383	516	619

(a) Including Brisbane Statistical Division.

Holdings Carrying Livestock

The numbers of holdings carrying various types of livestock are shown in the next table. Those carrying both cattle for meat production and cattle for milk production are included in both meat and milk cattle counts, while the counts of milk cattle holdings exclude those carrying house cows only.

HOLDINGS CARRYING LIVESTOCK, QUEENSLAND, AT 31 MARCH 1983

Statistical Division	Milk cattle	Meat cattle	Sheep	Pigs
Moreton (a)	1,039	3,367	52	557
Wide Bay-Burnett	638	3,900	72	705
Darling Downs	913	5,463	1,395	1,051
South-West	15	1,594	1,172	82
Fitzroy	112	2,512	38	209
Central-West	7	640	597	12
Mackay	55	1,094	4	43
Northern	7	714	3	44
Far North	277	894	5	60
North-West	—	490	186	9
Total Queensland	3,063	20,668	3,524	2,772

(a) Including Brisbane Statistical Division.

Sizes of Flocks and Herds

The sizes of sheep flocks and cattle and pig herds on agricultural holdings appear in the next table.

FLOCKS AND HERDS BY SIZE, QUEENSLAND, AT 31 MARCH 1983

Size of flock or herd	Milk cattle herds	Meat cattle herds	Sheep flocks	Pig herds
Under 20	130	2,432	151	868
20 to 49	382	2,985	169	562
50 to 99	1,001	3,808	160	416
100 to 199	1,230	3,654	145	333
200 to 499	311	3,818	264	348
500 to 999	8	1,924	297	151
1,000 to 1,999	1	1,266	483	65
2,000 to 4,999	—	609	972	23
5,000 to 9,999	—	102	650	3
10,000 and over	—	70	233	3
Total	3,063	20,668	3,524	2,772

4 CROPS

Area and Production of Crops

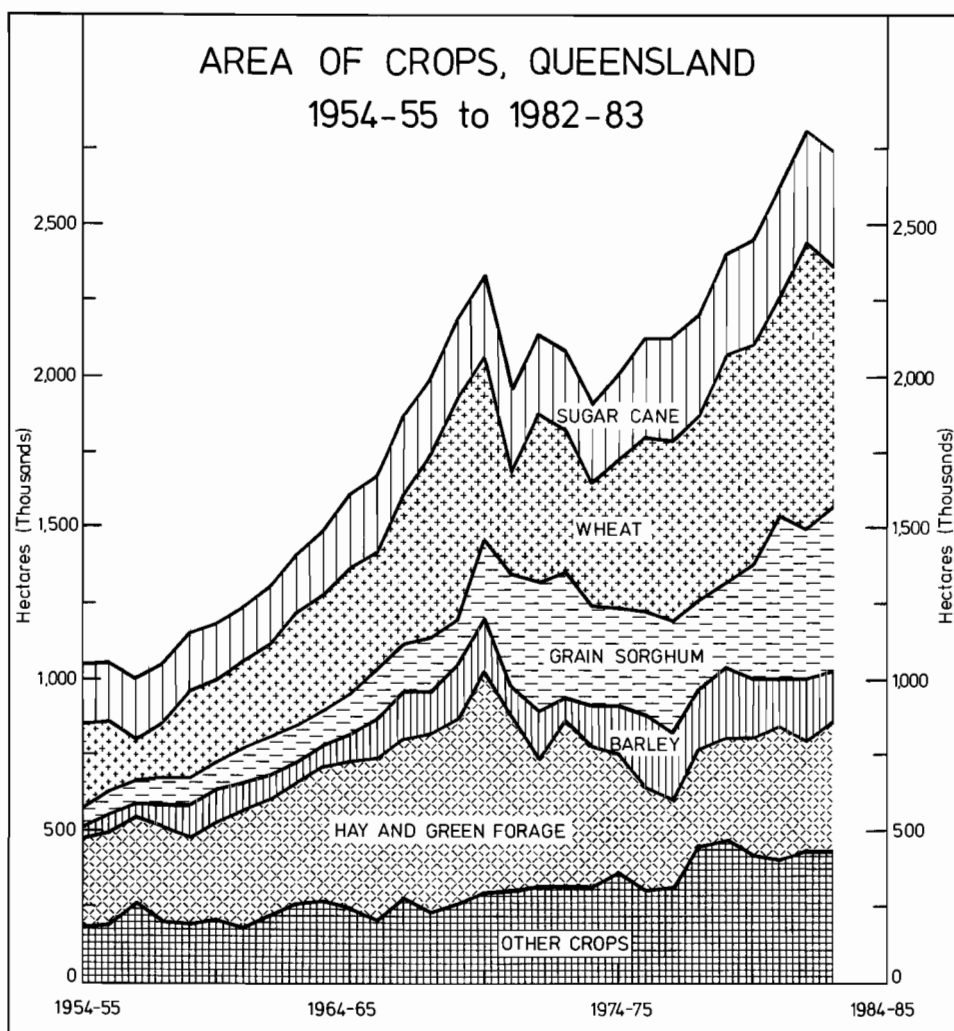
Queensland

Agriculture in Queensland differs from that in other States of Australia because of the greater proportion of crops grown which are suited to the tropical and sub-tropical climates. These crops include sugar cane, pineapples, bananas, cotton, ginger, etc. Moreover, the moist summer conditions in Queensland, as compared with the relatively dry summers in other States, have contributed to a considerable increase in the production of summer-growing crops such as grain sorghum, peanuts, sunflowers, navy beans, and soybeans, to meet a rising demand for processed foods, vegetable oils, and stock feed.

The area under all crops in Queensland had doubled in the period from 1900-01 to 1924-25 and quadrupled by 1945-46. In 1982-83 the area was 14 times the 1900-01 level.

Due to the predominance of cereal crops in other States, however, the area under all crops in Queensland in recent years was still only about 14 per cent of the Australian total.

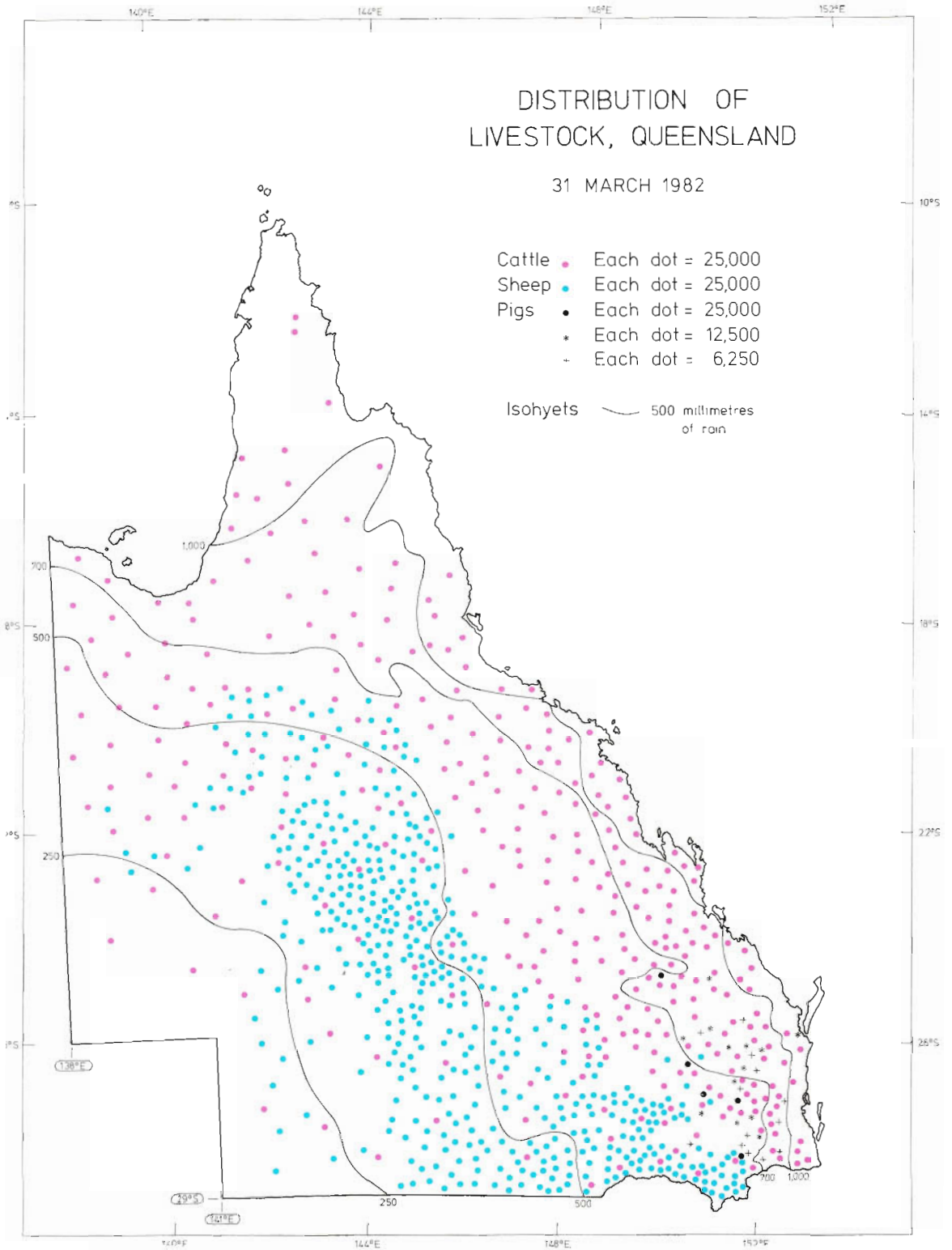
The next diagram illustrates the growth, and the distribution between the main crops, of the cultivated area of Queensland since 1954-55.



The principal components of the 'other crops' section of the diagram are miscellaneous grain crops, chiefly maize and millets; plantation and orchard fruit crops, particularly pineapples, apples, citrus, and bananas; all types of vegetables, of which pumpkins, potatoes,

DISTRIBUTION OF LIVESTOCK, QUEENSLAND

31 MARCH 1982



Mineral Occurrences

NON-METALS

Chrysoprase	Ch
Coal	C
Diatomite	D
Fluorspar	F
Gems	Gs
Limestone	Ls
Magnesite	Mg
Mineral Sands	MS
Oil Shale	Ol
Opal	Op
Phosphates	P
Silica	Si
Oil	Oil
Gas	Gas

METALS

Antimony	Sb
Bauxite	Bx
Bismuth	Bi
Cobalt	Co
Copper	Cu
Gold	Au
Iron	Fe
Lead	Pb
Manganese	Mn
Mercury	Hg
Molybdenum	Mo
Nickel	Ni
Silver	Ag
Tin	Sn
Uranium	U
Tungsten	W
Zinc	Zn

Prepared from information supplied by the Geological Survey of Queensland

tomatoes, and beans are the most important; and other field crops, including peanuts, linseed, cotton, tobacco, safflower, sunflower seed, soybeans, and navy beans.

The area, production, and yield per hectare of Queensland's principal crops are shown in the next table.

PRINCIPAL CROPS, QUEENSLAND

Crop	1900-01	1939-40	1979-80	1980-81	1981-82	1982-83
<i>Area</i>						
Sugar cane (a) hectares	29,401	106,101	255,358	274,259	301,658	302,503
Barley hectares	3,048	5,345	194,775	159,686	206,395	166,995
Grain sorghum hectares	(b)	1,779	368,698	528,394	489,144	531,932
Maize hectares	51,789	71,566	41,205	42,566	47,548	50,923
Wheat hectares	32,093	146,514	733,287	726,964	941,113	767,043
Green forage hectares	16,772	222,867	351,208	r 399,297	r 321,082	379,643
Hay (c) hectares	17,198	24,269	31,803	39,157	38,912	38,218
Cotton hectares	—	16,678	20,550	24,182	28,809	26,805
Peanuts hectares	(b)	4,993	31,273	26,773	32,984	35,458
Potatoes hectares	4,476	5,037	6,514	5,751	6,140	6,240
Pumpkins (d) hectares	(b)	(b)	3,801	4,102	4,031	4,351
Sunflower seed hectares	(b)	21	158,736	146,316	128,266	119,715
Tobacco hectares	269	1,478	3,523	3,454	3,341	3,341
Apples (e) hectares	(b)	1,382	3,557	3,423	3,404	3,399
Bananas (e) hectares	2,515	2,568	2,174	2,414	2,531	2,558
Pineapples (e) hectares	380	2,206	4,075	4,085	4,046	3,657
Tomatoes hectares	(b)	2,297	3,117	3,361	3,314	3,577
<i>Production</i>						
Sugar cane '000 tonnes	862	6,136	19,860	22,540	23,588	23,115
Barley tonnes	2,880	6,124	346,519	170,339	397,524	268,471
Grain sorghum tonnes	(b)	1,687	711,315	1,050,177	982,435	757,704
Maize tonnes	62,410	84,966	97,914	123,190	150,409	87,393
Wheat tonnes	32,496	184,933	845,959	485,255	1,482,331	754,384
Hay (c) tonnes	80,022	104,399	169,750	196,214	220,664	198,067
Cotton (raw) '000 kg	—	2,805	19,786	22,548	27,234	28,602
Peanuts tonnes	(b)	5,906	38,466	42,386	56,429	22,251
Potatoes tonnes	20,335	28,760	127,441	113,339	128,606	120,196
Pumpkins (d) tonnes	(b)	(b)	24,191	32,195	27,673	37,840
Sunflower seed tonnes	(b)	14	96,666	103,296	71,247	72,832
Tobacco '000 kg	205	950	7,679	7,592	7,980	7,549
Apples tonnes	(b)	4,704	30,265	23,086	35,957	28,790
Bananas tonnes	29,491	21,438	44,746	53,761	57,146	61,362
Pineapples tonnes	7,197	40,337	123,050	123,220	125,422	110,941
Tomatoes tonnes	(b)	12,432	45,705	55,660	58,029	75,727
<i>Yield per hectare</i>						
Sugar cane tonnes	29.3	57.8	77.77	82.19	78.19	76.41
Barley tonnes	0.94	1.15	1.78	1.07	1.93	1.61
Grain sorghum tonnes	(b)	0.95	1.93	1.99	2.01	1.42
Maize tonnes	1.21	1.19	2.38	2.89	3.16	1.72
Wheat tonnes	1.01	1.26	1.15	0.67	1.58	0.98
Hay (c) tonnes	4.65	4.30	5.34	5.01	5.67	5.18
Cotton (raw) kg	—	170	963	932	945	1,067
Peanuts tonnes	(b)	1.18	1.23	1.58	1.71	0.63
Potatoes tonnes	4.54	5.71	19.57	19.71	20.95	19.26
Pumpkins (d) tonnes	(b)	(b)	6.36	7.85	6.86	8.70
Sunflower seed tonnes	(b)	0.66	0.61	0.71	0.56	0.61
Tobacco kg	762	643	2,180	2,198	2,388	2,260
Apples tonnes	(b)	3.40	8.51	6.74	10.56	8.47
Bananas tonnes	11.7	8.4	20.59	22.27	22.58	23.99
Pineapples tonnes	30.0	18.2	30.2	30.2	31.00	30.34
Tomatoes tonnes	(b)	5.41	14.66	16.56	17.51	21.17

(a) Area cut for crushing.

(b) Not collected separately.

(c) Including lucerne and other pasture hay.

(d) For human consumption.

(e) Area bearing only except in 1900-01.

Australian States

The next table provides a comparison of the area, production, and yield, in the various States, of crops which are of particular importance in Queensland.

CROPS, AUSTRALIA, 1982-83

Crop	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Australia (a)
<i>Area</i>							
Sugar cane (b) '000 hectares	16	—	303	—	—	—	319
Barley '000 hectares	387	278	167	1,005	603	12	2,452
Grain sorghum '000 hectares	168	1	532	—	5	—	707
Maize '000 hectares	12	1	51	—	—	—	64
Wheat '000 hectares	3,162	1,327	767	1,398	4,865	1	11,520
Green feed or silage (c) '000 hectares	575	124	380	94	70	47	1,291
Hay (d) '000 hectares	165	348	38	152	250	51	1,012
Cotton '000 hectares	70	—	27	—	—	—	96
Peanuts '000 hectares	—	—	35	—	—	—	36
Potatoes '000 hectares	7	14	6	4	2	5	38
Tobacco '000 hectares	1	3	3	—	—	—	7
<i>Production</i>							
Sugar cane '000 tonnes	1,702	—	23,115	—	—	—	24,817
Barley '000 tonnes	189	75	268	668	717	22	1,939
Grain sorghum '000 tonnes	192	1	758	—	5	—	958
Maize '000 tonnes	48	2	87	—	1	—	139
Wheat '000 tonnes	1,499	394	754	692	5,534	1	8,876
Hay (d) '000 tonnes	476	1,065	198	352	748	166	3,011
Cotton (raw) '000 kg	70,616	—	28,602	—	—	—	99,218
Peanuts '000 tonnes	1	—	22	—	—	—	23
Potatoes '000 tonnes	109	291	120	96	69	173	858
Tobacco '000 kg	913	4,928	7,549	—	—	—	13,390
<i>Yield per hectare</i>							
Sugar cane tonnes	106.53	—	76.41	—	—	—	77.92
Barley tonnes	0.49	0.27	1.61	0.66	1.19	1.77	0.79
Grain sorghum tonnes	1.14	2.15	1.42	2.00	1.02	—	1.36
Maize tonnes	3.93	4.07	1.72	—	2.91	—	2.17
Wheat tonnes	0.47	0.30	0.98	0.50	1.14	1.60	0.77
Hay (d) tonnes	2.88	3.06	5.18	2.32	2.99	3.25	2.98
Cotton (raw) '000 kg	1.01	—	1.07	—	—	—	1.03
Peanuts tonnes	2.38	—	0.63	—	3.16	—	0.65
Potatoes tonnes	15.52	21.55	19.26	25.15	34.15	34.69	22.83
Tobacco '000 kg	1.74	1.76	2.26	—	—	—	2.01

(a) Including A.C.T. and N.T.
lucerne and other pasture.

(b) Area cut for crushing.

(c) Excluding lucerne and other pasture.

(d) Including hay cut from

Value of Crop Production

The gross value of crop production in Queensland has been estimated at \$1,279.0m for the 1982-83 season. By 'gross value' is meant the value which the crops would have realised in the principal wholesale markets. The figure is greater than the 'local value', i.e. the value at the farm, by the amount of the costs of getting the products to market. The local value of crops was approximately \$1,136.2m for 1982-83.

The next table shows the area, production, and gross value of the various crops grown in Queensland.

While Queensland's proportion of the area of Australia's agricultural crops is approximately 14 per cent, the value of its crops usually averages about a quarter of the Australian total.

PRODUCTION AND GROSS VALUE OF CROPS, QUEENSLAND, 1982-83

Crop	Area under crop	Production	Gross value p
	hectares	tonnes	\$'000
<i>Sugar cane</i>	369,680	..	489 882
Cut for crushing	302,503	23,114,767	482,489
Cut for plants	6,746	357,353	7,394
Standover etc.	60,431	..	..
<i>Cereals for grain</i>	1,581,969	1,943,367	311,103
Barley (2-row)	153,006	249,261	} 43,690
Barley (6-row)	13,989	19,210	
Canary seed	8,582	7,104	2,941
Grain sorghum	531,932	757,704	98,367
Maize	50,923	87,393	16,184
Oats	11,941	8,594	1,891
Panicum and millet	32,020	24,374	6,077
Rice	4,838	21,519	5,371
Wheat	767,043	754,384	134,579
Other	7,694	13,825	2,004
<i>Legumes mainly for grain</i>	57,000	43,542	13,554
Navy beans	5,848	1,786	1,545
Soybeans	34,345	38,096	10,736
Cow peas	3,579	1,008	389
Other	13,228	2,652	885
<i>Hay crops</i>	7,420	12,156	1,776
Oaten	2,364	5,270	801
Wheaten	1,866	2,307	295
Other	3,191	4,579	680
<i>Green feed or silage crops</i>	379,643	..	..
Oats	179,989	..	..
Sorghum	113,511	..	..
Other	86,144	..	..
<i>Miscellaneous field crops</i>	189,353	..	116,721
Cotton	26,805	(a) 28,602	44,159
Linseed	201	239	104
Peanuts	35,458	22,251	17,090
Safflower	3,834	1,723	499
Sunflower seed	119,715	72,832	19,393
Tobacco	3,341	7,549	35,477
<i>Citrus fruit</i>	1,942	36,910	15,732
Lemons	151	3,452	1,668
Mandarins	866	13,394	7,061
Oranges	862	18,328	6,318
Other	64	1,737	684
<i>Other orchard fruit</i>	6,631	..	27,289
Apples	3,399	28,790	14,315
Apricots	153	556	690
Avocados	773	2,026	4,733
Custard apples	156	326	323
Mangoes	642	2,019	2,240
Nectarines	169	681	660
Peaches	399	1,688	1,284
Pears	391	2,660	1,317
Plums	458	1,724	1,532
Other	89	..	195
<i>Nuts (edible)</i>	869	n.a.	2,034

PRODUCTION AND GROSS VALUE OF CROPS, QUEENSLAND, 1982-83 — *continued*

Crop	Area under crop	Production	Gross value <i>p</i>
	hectares	tonnes	\$'000
<i>Other fruit</i>	6,764	..	62,892
Bananas	2,558	61,362	30,722
Papaws	295	3,222	2,233
Passion-fruit	163	2,191	1,205
Pineapples	3,657	110,941	25,528
Strawberries	60	1,047	3,102
Other	32	..	103
<i>Grapes</i>	1,430	5,706	4,590
<i>Fruit (including grapes) areas not yet bearing</i>	9,125	..	..
<i>Vegetables for human consumption</i>	31,050	..	173,630
Beans, green	3,437	16,360	8,316
Cabbages	535	14,294	1,807
Capsicums	491	5,083	4,043
Carrots	876	20,788	5,496
Cucumbers	802	8,682	3,201
Lettuce	501	10,702	4,925
Melons: Rock	778	11,903	6,151
Water	2,183	29,337	4,078
Onions	743	23,001	6,482
Potatoes	6,240	120,196	27,155
Pumpkins	4,351	37,840	8,353
Tomatoes	3,577	75,727	64,493
Other	6,535	..	29,129
<i>Other crops</i>	5,353	..	29,793
Ginger	176	6,400	1,936
Nursery products, turf, and flowers	1,143	..	24,403
Other	4,034	..	3,454
<i>Total crops (excluding pasture)</i>	2,648,230	..	1,248,996
<i>Pastures cut for hay</i>	30,798	185,911	28,802
Lucerne	19,024	152,337	24,270
Other	11,774	33,574	4,532
<i>Pastures harvested for seed</i>	7,251	211	1,163
<i>Pastures cut for green feed or silage</i>	4,010	..	..
<i>Total area of crops and pastures</i>	2,690,288	..	1,278,961
<i>Pasture area at 31 March 1983</i>	3,633,758	..	..
Lucerne	27,585	..	..
Other sown pasture	3,606,173	..	..

(a) Weight of raw cotton.

Gross values of principal crops for six seasons are given in the next table.

GROSS VALUE OF CROP PRODUCTION, QUEENSLAND
(\$'000)

Crop	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83 <i>p</i>
Sugar cane (a)	410,737	383,121	529,492	772,486	578,317	489,882
Barley	19,536	46,586	38,981	24,882	55,314	43,690
Canary seed	2,784	2,846	1,345	780	1,831	2,941
Grain sorghum	40,449	62,376	73,098	133,199	107,774	98,367
Maize	7,169	9,740	12,726	17,990	21,285	16,184
Wheat	59,362	251,877	133,787	76,806	236,382	134,579
Other grain	9,954	8,637	7,564	12,071	14,456	15,342

GROSS VALUE OF CROP PRODUCTION, QUEENSLAND—continued
(*\$'000*)

Crop	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83 <i>p</i>
Hay	14,314	18,783	18,638	23,172	23,815	30,578
Cotton	12,819	16,790	28,143	28,252	34,253	44,159
Green beans	5,196	5,778	5,767	7,559	6,635	8,316
Onions	4,949	4,926	5,138	8,355	14,117	6,482
Peanuts	19,974	28,227	22,038	35,755	36,127	17,090
Potatoes	12,610	16,978	19,908	27,588	33,175	27,155
Pumpkins	2,244	4,484	3,813	6,214	5,442	8,353
Soybeans	11,768	16,117	10,911	15,984	13,070	10,736
Sunflower seed	23,358	30,503	25,882	25,094	17,941	19,393
Tobacco	28,361	29,568	29,857	32,334	36,125	35,477
Tomatoes	19,308	21,522	24,396	37,473	40,741	64,493
Apples	9,549	12,838	11,073	10,059	17,630	14,315
Bananas	14,640	17,275	15,695	24,075	27,349	30,722
Citrus fruit	12,586	15,979	14,316	16,437	18,324	15,732
Grapes	3,980	4,178	4,079	5,246	4,131	4,590
Pineapples	16,002	18,310	20,113	19,742	20,516	25,528
Other fruits	12,223	14,653	16,070	18,105	21,213	21,651
Other crops	50,749	55,189	56,429	72,479	86,344	93,207
Total	824,619	1,097,281	1,129,259	1,452,137	1,472,311	1,278,961

(a) Including cane cut for plants.

Distribution of Crops

Agricultural Districts

The distribution in statistical divisions of some crops is shown in the next table (for sugar districts, see page 294).

CROP PRODUCTION, QUEENSLAND, 1982-83

Statistical Division	Wheat	Grain sorghum	Bananas	Pine-apples	Cotton (raw)	Tobacco	Tomatoes
	tonnes	tonnes	tonnes	tonnes	'000 kg	'000 kg	tonnes
Moreton (a)	10,300	13,356	11,887	59,561	341	572	7,470
Wide Bay-Burnett	24,664	42,265	227	29,393	—	198	26,515
Darling Downs	608,956	495,410	4	—	9,839	191	3,701
South-West	26,875	6,932	—	—	10,018	—	1
Fitzroy	81,358	137,370	21	18,678	8,399	—	380
Central-West	—	503	—	—	—	—	—
Mackay	2,192	57,823	1	456	5	—	60
Northern	—	2,277	12	2,207	—	18	37,188
Far North	40	1,769	49,191	647	—	6,570	412
North-West	—	—	19	—	—	—	—
Total Queensland ..	754,384	757,704	61,362	110,941	28,602	7,549	75,727

(a) Including Brisbane Statistical Division.

Sugar

Sugar cane is grown in two States—Queensland and New South Wales. Of the 3,536,000 tonnes of raw cane sugar produced in Australia in the 1982 season, 94.0 per cent was produced in Queensland and 6.0 per cent in New South Wales.

The production of sugar cane is the leading feature of Queensland agriculture and occupies most of the river flats in the fertile coastal valleys. Cultivation is intensive and irrigation is used wherever practicable, as in the Ayr and Bundaberg areas. Harvesting begins in most districts about June and ends in November or December and is now nearly all done mechanically.

During the 1982 season 30 mills operated in Queensland. Each mill has assigned to it the cane grown on a particular area. This system was first developed as an essential accessory to individual small-farm production, and is further outlined in the chapter on marketing. Growers and mills collaborate closely in organisation and technical research.

The Queensland sugar country may be grouped into five main areas, as shown in the next table. The most northerly area (Far North Statistical Division) stretches from Mossman in the north to Cardwell in the south; Northern Division covers the Ingham, Townsville, and Ayr districts; while Mackay Division embraces the Proserpine and Mackay areas. Sugar is easily the most important crop grown on coastal farms from Mackay northwards, but south of Mackay other forms of agriculture are combined to some extent with cane-growing. The two southern divisions are Wide Bay-Burnett (Bundaberg, Maryborough, Gympie, and surrounding districts) and Moreton (the areas north and south of Brisbane).

Details of the cultivation and production of sugar are shown in the next table.

SUGAR PRODUCTION, QUEENSLAND

Particulars	Area cultivated (a)	Area cut for crushing	Cane produced	Sugar produced (b) (c)	Cane per hectare cut	Sugar per hectare cut	Cane for each tonne of sugar
	'000 hectares	'000 hectares	'000 tonnes	'000 tonnes	tonnes	tonnes	tonnes
1977 season	342	280	22,331	3,209	79.6	11.4	6.96
1978 season	330	238	20,135	2,749	84.7	11.6	7.33
1979 season	337	255	19,860	2,807	77.8	11.0	7.07
1980 season	355	274	22,540	3,149	82.2	11.5	7.16
1981 season	373	302	23,588	3,250	78.2	10.8	7.26
1982 season	370	303	23,115	3,325	76.4	11.0	6.95

CULTIVATION AND PRODUCTION IN DIVISIONS, 1982

	'000 hectares	'000 hectares	'000 tonnes	'000 tonnes	tonnes	tonnes	tonnes
Far North	89.0	71.8	5,479	736	76.3	10.3	7.44
Northern	86.1	68.8	6,319	946	91.8	13.7	6.68
Mackay	110.4	92.2	6,077	899	65.9	9.8	6.76
Wide Bay-Burnett ..	71.9	59.6	4,484	642	75.3	10.8	6.98
Moreton (d)	12.0	10.1	756	102	74.9	10.1	7.43

(a) Excluding fodder crops.
Statistical Division.

(b) 94 net titre.

(c) Source: Bureau of Sugar Experiment Stations.

(d) Including Brisbane

Cereal Grain Crops

Wheat and grain sorghum are the second and third most important agricultural crops after sugar cane in Queensland.

The wheat crop in 1982-83 produced 754,000 tonnes from 767,000 hectares. The main areas of this production were the Darling Downs Division, 81 per cent; Fitzroy Division, 11 per cent; and South-West Division, 4 per cent.

Grain sorghum has undergone rapid development in recent years, expanding from 1,779 hectares in 1939-40 to reach 528,000 hectares in 1980-81, when production was 1,050,000 tonnes. In 1982-83, this summer growing crop produced 758,000 tonnes from 532,000 hectares.

In 1982-83 barley and maize, the other major cereal grain crops, produced 268,000 and 87,000 tonnes for a value of \$43,690,000 and \$16,184,000, respectively.

Fruit Crops

Queensland is practically the sole Australian source of pineapples and most other tropical fruits, but in recent years has supplied only about a third of the Australian banana crop.

Pineapples, bananas, citrus, and apples are the most important Queensland fruit crops. Pineapples are produced chiefly in the coastal areas between Brisbane and Maryborough and in the Rockhampton district. Bananas are grown mainly in the Albert, Pine Rivers, Caboolture, and Maroochy districts in south Queensland and in the area between Cardwell and Cairns in north Queensland. Citrus fruit is grown fairly extensively in the coastal and sub-coastal areas, Gayndah, Maroochy, Maryborough, and Gatton being the most important districts, while apples are restricted mainly to the Stanthorpe area.

Other tropical fruits, particularly papaws, custard apples, and mangoes, are grown throughout coastal Queensland. Papaws are grown chiefly in the Gladstone district as well as in rural areas around Brisbane and Maryborough, custard apples mainly in rural districts within 80 kilometres of Brisbane, and mangoes in the tropical coastal districts, particularly around Bowen.

Almost all of Queensland's pome and stone fruit crops, as well as grapes, are grown in the more temperate high country around Stanthorpe on the southern Darling Downs.

Cotton

The cotton industry became associated with the development of many areas in southern and central Queensland, particularly the Callide and Dawson Valleys. A peak of 27,500 hectares grown mainly by dry-farming methods was reached in the mid-1930s, but the area planted dropped to the low level of 1,000 hectares by the late 1940s. Greater use of irrigation in the 1960s renewed interest in cotton growing and as a result 96 per cent of the 1982–83 crop of 27,000 hectares was grown under irrigation for the record production of 28.6m kilograms of raw cotton. St George, Dawson-Callide Valleys, Emerald, Central Downs, and Lockyer Valley are now the main cotton-producing areas in the State.

Tobacco

Small amounts of tobacco were grown in Queensland from the earliest days. It was only after 1930, however, that increased tariff protection led to an expansion of cultivation. In recent years Queensland has produced half of the Australian crop, the remainder coming from Victoria and New South Wales. The area under tobacco in Queensland in 1982–83 was 3,300 hectares, producing 7.5m kg of dried leaf. Approximately 87 per cent of this production was from the Mareeba district (Atherton Tableland), 8 per cent from the Glasshouse Mountains district, 2 per cent from the Bundaberg district, and 3 per cent from the Inglewood-Texas district. Small quantities were produced near Ingham and Miriam Vale.

Peanuts

Under tariff protection, peanuts have been grown in Queensland for many years. From a pre-war peak of 8,600 hectares in 1938, the area planted rose in the post-war years and areas in excess of 33,000 hectares were grown in the early 1970s. A peak production of 61,500 tonnes was harvested in the 1979 season. For the 1983 season, 22,000 tonnes were produced from 35,000 hectares.

The most important area for peanuts is the Nanango-Kingaroy-Murgon district in the south-west of the Wide Bay-Burnett Division, followed by the Atherton Tableland and northern areas of the Darling Downs. The crop is processed and marketed by the Peanut Marketing Board.

Linseed, Safflower, and Sunflower

These oilseed crops are grown mainly in the Darling Downs, Fitzroy, and Mackay Divisions. Areas sown to them fluctuate greatly from year to year, depending on seasonal conditions and prices. Linseed was first grown commercially in Queensland during 1947–48 when 45 hectares were harvested. A peak production of 34,700 tonnes from 39,300 hectares was

reached in 1964-65. In later years linseed has been a less attractive economic proposition to farmers and generally has fluctuated between 1,000 and 11,000 tonnes. Production, however, reached only 200 tonnes in 1982-83.

Safflower, relatively new to Queensland's agriculture, was first grown commercially in the late 1950s. Following a peak of 38,600 hectares planted in 1967-68, production problems resulted in considerably reduced plantings. In the late 1970s, stability in the industry increased and in 1978-79 a record production of 32,600 tonnes was obtained from 38,100 hectares. In recent years production has again dropped and in 1982-83 was 1,700 tonnes from 3,800 hectares.

While small areas of sunflower seed have been grown in Queensland for many years, plantings increased significantly in the 1970s. From 15,600 hectares in 1969-70, the area sown increased annually to reach 104,900 hectares in 1974-75, from which a production of 68,400 tonnes was harvested. Further peaks in both area and production were established in 1978-79 when the crop yielded a record 121,600 tonnes from 161,800 hectares. In 1982-83, 72,800 tonnes were obtained from 119,700 hectares.

Soybeans

Increased demands for the oil and high protein contents of soybeans led to much research into the industry in Queensland. Consequently the early 1970s saw a rapid expansion in the areas sown to soybeans. From 33,000 hectares planted in 1974-75 a peak production of 52,500 tonnes was obtained. Since then production has remained at a high level and in 1978-79 reached a new record of 65,200 tonnes from 36,400 hectares planted. The 1982-83 crop yielded 38,100 tonnes from 34,300 hectares planted. The South Burnett, Central Darling Downs, and West Moreton are the main growing areas.

Canary Seed

This birdseed crop, grown in Queensland since 1915, is cultivated mainly on the Darling Downs. The area planted to this crop fluctuates greatly from year to year. The 1982-83 crop resulted in a harvest of 7,100 tonnes from 8,600 hectares.

Rice

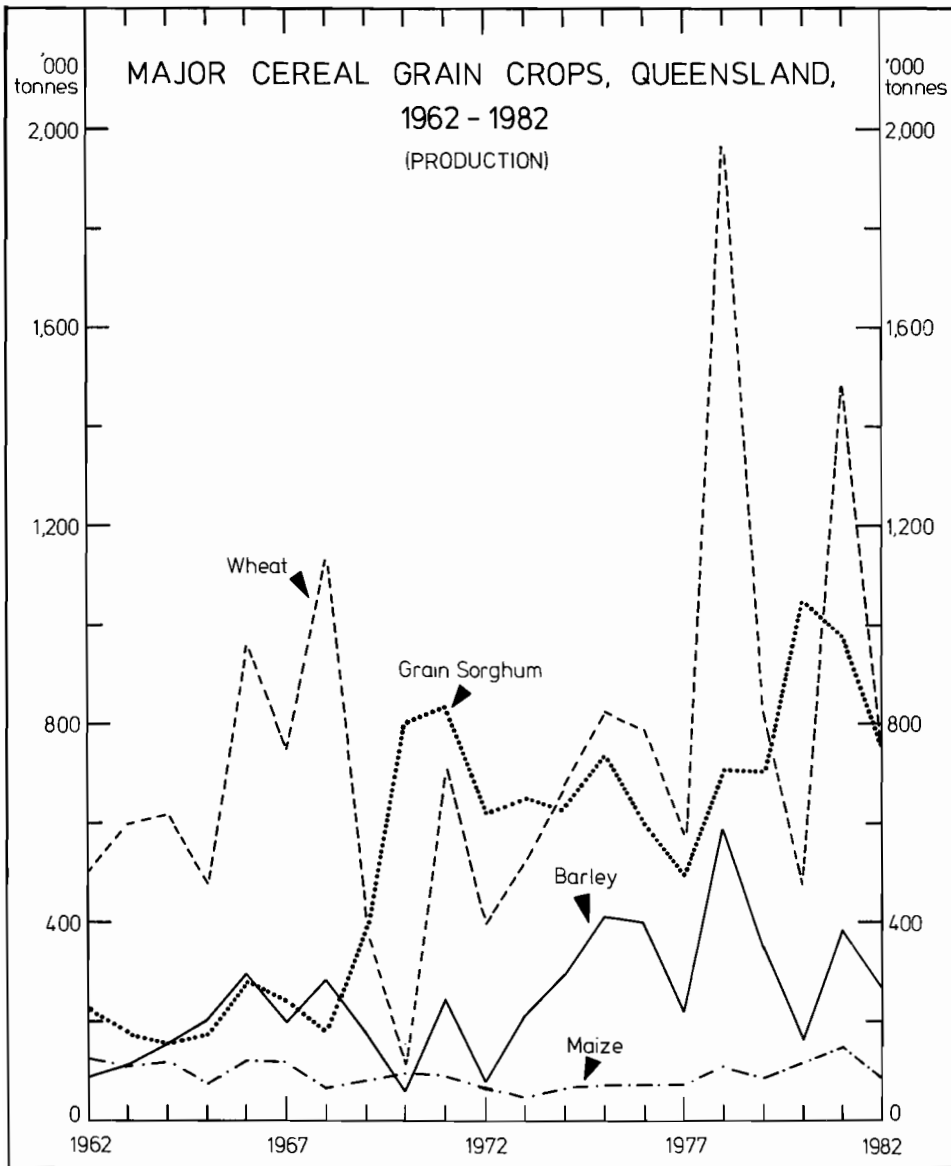
Rice has been grown commercially in the Burdekin River and Ingham areas of Queensland since 1968 and more recently in the Mareeba area. However, it is only since the setting up of the Rice Marketing Board that the crop has assumed a position of some importance in Queensland's rural industry.

North Queensland has the advantage of being able to produce the long grain variety of rice, which cannot be produced successfully elsewhere in Australia. Furthermore, the favourable climatic conditions make it possible to grow two crops in a year, one during the winter months and another during the summer. A production peak of 24,696 tonnes of paddy rice was reached in 1979-80. In 1982-83 the production of paddy rice in Queensland amounted to 21,500 tonnes (13,100 tonnes from the crop harvested December-January and 8,400 tonnes from the crop harvested May-June).

Ginger

There has been a ginger-growing industry in the Buderim area for many years. Wartime import restrictions fostered the industry with the result that, in the immediate post-war years, production increased to over 680,000 kg, but it fell steeply after 1950 under competition from imported ginger. The industry has since expanded under tariff protection, and production, including quantities retained for seed, amounted to 6,400,000 kg in 1982-83.

Ginger roots, or rhizomes, which are harvested early in the season are crystallised, preserved in syrup, or sliced and used in confectionery, while later harvests produce a more



fibrous rhizome which is dried, ground, and used for spices and flavouring. A small quantity of the total production of ginger is released as green ginger, while the balance of the crop is processed by the Buderim Ginger Growers' Co-operative Association.

Artificial Fertilisers

Details of artificial fertilisers used on agricultural holdings are only collected every three years. The next table gives particulars of areas fertilised and quantities used on the various crops and pastures for 1981-82, the latest year of collection.

ARTIFICIAL FERTILISERS USED ON CROPS AND PASTURES, QUEENSLAND, 1981-82 (a)

Crop	Area fertilised (hectares)	Fertilisers used (tonnes)					Total
		Super-phosphate	Urea	Sulphate of ammonia	Other straight nitrogenous	Other artificial	
Lucerne	5,521	1,162	211	154	127	205	1,859
Other pastures ..	144,095	23,103	5,625	407	2,427	4,758	36,320
Wheat	149,327	4,234	2,192	296	3,668	1,818	12,208
Oats	36,805	2,027	1,792	125	745	898	5,587
Barley	103,553	3,322	2,237	337	3,007	1,740	10,643
Grain sorghum ..	148,600	3,070	3,785	568	5,788	2,307	15,518
Other cereals ..	42,386	2,475	2,491	110	1,509	2,001	8,586
Sugar cane	300,860	30,748	62,793	16,039	57,192	121,194	287,966
Vegetables	19,363	2,503	2,709	804	2,116	8,444	16,576
Fruit	16,569	2,014	3,850	1,104	1,908	10,979	19,855
Grape vines	1,002	80	18	9	36	367	510
Other crops	74,582	5,591	4,137	1,191	4,293	6,928	22,140
Total	1,042,663	80,329	91,840	21,144	82,816	161,639	437,768

(a) Twelve months ended 31 March.

5 LIVESTOCK

Generally the total value of agricultural production in Queensland is fairly evenly divided between crops and livestock. During the four years to 1977-78, however, when livestock prices were low and in the process of recovering, the livestock component fluctuated around only one-third of the total value with crops taking up the remaining two-thirds. In 1982-83 livestock production (slaughterings and other disposals and livestock products) amounted to \$1,102.3m, or 46 per cent of the total value of agricultural production of \$2,381.3m.

Meat cattle are widely spread throughout the State, but milk cattle are mostly distributed along the eastern coastline south of Rockhampton, the eastern Darling Downs, and on the Atherton Tableland.

The main sheep belt is a broad strip running south-east and north-west through the centre of Queensland extending to the border of New South Wales but not reaching as far as the Gulf of Carpentaria.

Pig raising is confined mostly to the Moreton, Wide Bay-Burnett, Darling Downs, and Fitzroy Divisions.

Types of Livestock

The next table shows the numbers of livestock in agricultural holdings classified according to types.

Meat cattle numbers in Queensland, which showed annual increases ranging between 6 and 14 per cent in the early 1970s, reached a peak in 1978. A decline in the number of breeding stock, evident since 1976, resulted in the total number of meat cattle at 31 March 1983 being 5 per cent below that of a year earlier. Most Statistical Divisions experienced decreases, with Central-West Division (22 per cent), Fitzroy Division (7 per cent), Northern Division (6 per cent), Far North Division (6 per cent), and North-West Division (6 per cent) recording the greater decreases. While there was a slight increase in the number of milk cattle in 1982-83, there has been a declining trend since the mid-1950s when numbers were three times as great.

Sheep numbers in Queensland at 31 March 1983 decreased by 1 per cent when compared with the previous year's figure. Flocks still remain far below (51 per cent) the high level reached before the 1965 drought.

Pigs on agricultural holdings at 31 March 1983 increased by 7 per cent on the number recorded a year earlier.

LIVESTOCK, QUEENSLAND, AT 31 MARCH

Description	1978	1979	1980	1981	1982	1983
<i>Meat cattle</i>						
Bulls	177,635	171,458	168,774	169,235	174,443	166,589
Bull calves for service	25,310	30,083	32,179	32,540	31,943	34,305
Cows and heifers	4,975,862	4,690,536	4,628,687	4,492,354	4,437,424	4,254,349
Calves and vealers	2,312,161	2,124,771	1,898,433	1,789,296	1,852,161	1,810,663
Other (spayed cows, bullocks, etc.) ..	3,567,538	3,444,713	3,228,530	3,077,149	2,919,737	2,714,820
Total for meat production ..	11,058,506	10,461,561	9,956,603	9,560,574	9,415,708	8,980,726
<i>Milk cattle</i>						
Bulls	6,874	6,161	5,478	5,372	5,028	4,658
Bull calves for service	1,232	1,292	1,381	1,188	1,103	1,114
Cows, in milk and dry	287,337	265,367	247,336	235,516	234,630	234,494
House cows and heifers (on non-dairy holdings)	29,576	24,205	23,128	22,944	23,597	20,959
Heifers (one year and over)	66,661	61,238	56,369	59,469	59,562	62,264
Heifer calves	40,051	39,669	41,352	39,523	42,170	45,240
Total for milk production ..	431,731	397,932	375,044	364,012	366,090	368,729
Total cattle	11,490,237	10,859,493	10,331,647	9,924,586	9,781,798	9,349,455
<i>Sheep</i>						
Rams	170,197	174,749	167,810	148,173	150,053	152,304
Breeding ewes	5,700,443	5,763,081	5,363,561	4,974,398	5,095,099	5,126,386
Other ewes	575,740	560,198	611,078	471,124	439,724	636,616
Lambs and hoggets	2,353,001	2,633,865	1,855,645	1,206,555	2,826,487	2,039,645
Wethers	4,639,084	4,460,387	4,165,234	3,819,842	3,832,405	4,270,052
Total sheep	13,438,465	13,592,280	12,163,328	10,620,092	12,343,768	12,225,003
<i>Pigs</i>						
Boars	5,251	5,399	5,521	5,209	5,026	5,082
Breeding sows	58,881	60,851	64,123	65,766	66,747	69,808
Other	398,846	420,645	440,784	430,849	441,614	476,579
Total pigs	462,978	486,895	510,428	501,824	513,387	551,469
<i>Horses</i>						
Total horses	161,542	170,839	175,973	177,695	163,778	165,309

Livestock in Australian States

The Queensland proportion of the total livestock of Australia is indicated in the next table.

LIVESTOCK, AUSTRALIA, AT 31 MARCH 1983

State or Territory	Cattle	Sheep	Pigs
	'000	'000	'000
New South Wales	5,018	48,095	794
Victoria	3,408	22,748	387
Queensland	9,349	12,225	551
South Australia	828	15,448	405
Western Australia	1,754	30,164	300
Tasmania	562	4,451	51
Northern Territory	1,548	1	2
Australian Capital Territory	10	104	—
Total Australia	22,478	133,237	2,490
Queensland as a proportion of Australia	% 41.59	% 9.18	% 22.14

Distribution of Livestock

Numbers of livestock in the statistical divisions are shown in the next table, and the distribution of cattle, sheep, and pigs in the map facing page 288.

LIVESTOCK, QUEENSLAND, AT 31 MARCH 1983

Statistical Division	Cattle			Sheep	Pigs
	Meat	Milk	Total		
Moreton (a)	401,006	134,308	535,314	3,774	69,687
Wide Bay-Burnett	867,997	78,105	946,102	6,596	168,391
Darling Downs	1,093,291	87,484	1,180,775	2,107,467	247,416
South-West	737,992	1,853	739,845	4,687,542	4,508
Fitzroy	1,489,716	15,170	1,504,886	25,822	43,568
Central-West	587,640	906	588,546	4,172,436	346
Mackay	828,481	11,345	839,826	433	2,300
Northern	844,840	945	845,785	4,265	6,654
Far North	656,630	38,414	695,044	269	8,458
North-West	1,473,133	199	1,473,332	1,216,399	141
Total Queensland ..	8,980,726	368,729	9,349,455	12,225,003	551,469

(a) Including Brisbane Statistical Division.

Stock Losses

In 1982-83 cattle losses from drought and other natural causes totalled 573,000, a loss of 5.9 per cent of the total herd at the beginning of the year, compared with a loss of 382,000, or 3.8 per cent reported in the previous year. Sheep losses were 1,196,000, compared with 705,000 in 1981-82, representing a loss of 9.7 per cent of the total numbers of sheep and lambs at the beginning of the year, compared with a loss of 6.6 per cent in 1981-82.

Livestock Slaughterings and Lambing

The next table shows the total numbers of livestock slaughtered in meatworks, slaughterhouses, and on stations and farms, and the addition to sheep numbers by lambing, for six years.

LIVESTOCK SLAUGHTERINGS AND LAMBING, QUEENSLAND

Year	Slaughterings (a)			Lambing (b)		
	Cattle and calves	Sheep and lambs	Pigs	Ewes mated	Lambs marked	Proportion (c)
	'000	'000	'000	'000	'000	%
1977-78	3,148	1,480	747	5,135	2,568	50.0
1978-79	3,296	1,442	721	4,972	2,978	59.9
1979-80	2,606	1,378	813	4,649	2,237	48.1
1980-81	2,148	1,332	838	3,241	1,281	39.5
1981-82	2,610	1,300	812	4,690	3,060	65.2
1982-83	2,454	1,359	863	4,359	2,212	50.7

(a) In meatworks, slaughterhouses, and on holdings. For human consumption only.

(b) Twelve months ended 31 March.

(c) Lambs marked to ewes mated.

Sheep Breeds

Almost all of the sheep in the State are reared for wool production with pure-breed Merinos accounting for about 97 per cent of the total number.

Pig Breeds

The two main breeds, with crosses between these two breeds, are Large White, about 60 per cent, and Landrace, about 30 per cent. Berkshire, Wessex Saddleback, and Tamworth are other breeds, but are in much smaller numbers.

Cattle Breeds

Although statistics of livestock numbers are collected annually, as part of the Agricultural Census, details of cattle breeds are obtained only on a periodic basis. Meat cattle breed statistics

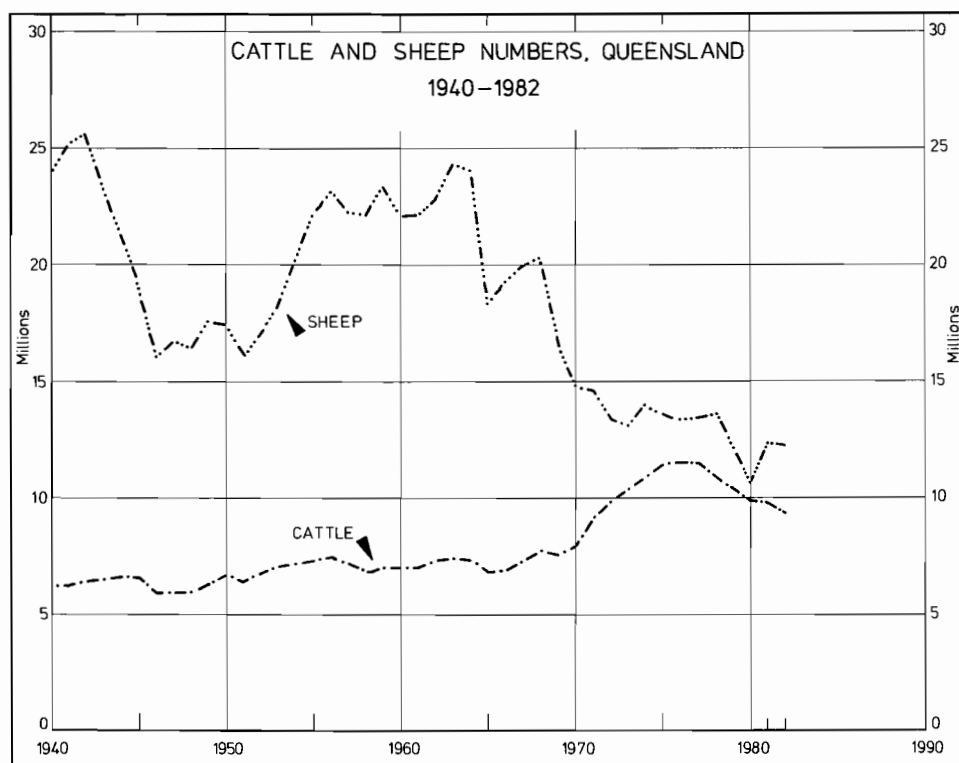
were compiled in Queensland in 1973, 1977, and 1982. Details of milk cattle breeds were collected for the first time in 1982. The following table shows the total cattle herd at 31 March 1982 classified according to the major breeds. The small numbers of house cows on non-dairy establishments (23,597) have been excluded from the table.

CATTLE BREEDS (a), QUEENSLAND, AT 31 MARCH 1982

Breed particulars	Bulls one year and over	Cows and heifers one year and over	Calves under one year	Other cattle one year and over	Total cattle	Breed proportion 1982	
						Meat	Milk
	No.	No.	No.	No.	No.	%	%
Straight breeds							
Tropical breeds (meat)							
Africander	327	1,273	791	1,201	3,592	—	..
Braford	9,827	160,261	73,432	87,692	331,212	3.5	..
Brahman	29,110	293,741	118,857	171,484	613,192	6.5	..
Brangus	601	11,778	4,865	5,961	23,205	0.2	..
Droughtmaster	12,335	162,018	71,393	108,051	353,797	3.8	..
Sahiwal	176	1,298	578	197	2,249	—	..
Santa Gertrudis	19,426	275,496	111,371	173,028	579,321	6.2	..
Total	71,802	905,865	381,287	547,614	1,906,568	20.2	..
British and European breeds (meat)							
Angus	993	20,729	10,300	8,288	40,310	0.4	..
Charolais	468	4,087	2,372	1,983	8,910	0.1	..
Chianina	103	571	523	432	1,629	—	..
Devon (including polled)	314	6,571	3,245	3,465	13,595	0.1	..
Hereford (including polled)	30,608	877,480	410,578	451,573	1,770,239	18.8	..
Limousin	46	277	154	93	570	—	..
Murray Grey	767	13,628	7,358	5,596	27,349	0.3	..
Red Poll	81	2,485	944	560	4,070	—	..
Shorthorn (including polled)	14,932	375,113	138,261	231,733	760,039	8.1	..
Simmental	460	3,465	2,413	2,406	8,744	0.1	..
Total	48,772	1,304,406	576,148	706,129	2,635,455	28.0	..
Dairy breeds							
A.I.S.	1,505	69,370	12,114	5,235	88,224	..	25.8
A.F.S.	9	710	134	—	853	..	0.2
A.M.Z.	4	150	17	8	179	..	0.1
Ayrshire	38	1,536	184	1	1,759	..	0.5
Friesian	1,517	110,483	19,190	2,732	133,922	..	39.1
Guernsey	177	9,446	1,243	111	10,977	..	3.2
Jersey	590	34,044	4,558	1,292	40,484	..	11.8
Total	3,840	225,739	37,440	9,379	276,398	..	80.7
Other straight breeds (b)	1,605	57,117	9,886	1,701	70,309	0.2	16.3
Total straight breeds	126,019	2,493,127	1,004,761	1,264,823	4,888,730	48.4	97.0
Cross breeds							
Brahman/British	28,927	1,281,888	505,498	974,794	2,791,107	29.6	—
British/British	3,384	192,855	77,105	130,438	403,782	4.3	—
Other tropical/British	11,953	463,669	196,787	370,938	1,043,347	11.1	—
Tropical/tropical	1,855	76,004	35,496	54,451	167,806	1.8	—
European/other	1,936	38,303	23,214	21,799	85,252	0.9	—
Beef/dairy	632	49,640	25,212	22,495	97,979	1.0	0.9
Other (including unspecified)	4,765	136,130	59,304	79,999	280,198	2.9	2.1
Total cross breeds	53,452	2,238,489	922,616	1,654,914	4,869,471	51.6	3.0
Total all breeds	179,471	4,731,616	1,927,377	2,919,737	9,758,201	100.0	100.0

(a) Excluding house cows on non-dairy establishments. unspecified straight breed cattle.

(b) Including recognised breeds too small numerically to tabulate separately and



6 WOOL

Wool Production

Although wool production in Queensland has declined in recent years, it is still one of the State's most valuable products, accounting for 6 per cent of the total value of agricultural production in 1982-83. Wool prices in 1982-83 averaged 265.25 cents per kilogram compared with 259.02 cents in the previous year.

The next table shows the Queensland wool production for six years. The number of sheep and lambs shorn in 1982-83 decreased by 19 per cent on the figure for the previous year.

WOOL PRODUCTION, QUEENSLAND

Year	Sheep and lambs shorn	Wool clip		Other wool (b) (greasy basis)	Total wool produced (greasy basis)	Value of wool produced (c)
		Shorn wool (a) (greasy basis)	Weight per fleece (greasy basis)			
	'000	'000 kg	kg	'000 kg	'000 kg	\$'000
1977-78	12,913	54,259	4.20	5,013	59,272	106,889
1978-79	13,734	59,319	4.32	4,512	63,831	127,428
1979-80	12,027	55,078	4.58	3,923	59,001	138,554
1980-81	10,633	43,298	4.07	3,182	46,480	116,970
1981-82	12,950	56,942	4.40	3,733	60,674	150,829
1982-83 <i>p</i> ..	10,554	50,025	4.74	4,065	54,090	136,753

(a) Including crutchings.
Brisbane market.

(b) Dead wool, fellmongered wool, and wool on skins exported.

(c) Valued at average price of wool on

The wool industry is largely conducted on grazing properties in the natural grasslands of the south-west, central-west, and north-west. Only a small portion of the sheep numbers are on agricultural farms, these being nearly all on the Darling Downs. Sheep stations vary greatly in size, some of the larger properties shearing up to 20,000 or more sheep in a season. Many of the original large leaseholds have been sub-divided into grazing selections of about 10,000 hectares and are commonly run by individual families, while pastoral companies manage many of the large leaseholds.

Wool Districts

While total wool production figures relating to the State as a whole, as shown in the previous table, are on a year ending 30 June basis, district information appearing in the next table relates to the 12 months ended 31 March.

WOOL CLIP, QUEENSLAND, 1982-83 (a)

Statistical Division	Sheep and lambs shorn	Shorn wool (b) (greasy basis)		Proportion of wool produced in each division	Proportion of total sheep in each division (c)
		Total	Per sheep		
	'000	'000 kg	kg	%	%
Moreton (d)	2	7	3.08	—	—
Wide Bay-Burnett	7	27	3.91	—	0.1
Darling Downs	1,903	9,355	4.92	16.1	17.2
South-West	4,379	21,625	4.94	37.3	38.3
Fitzroy	23	103	4.52	0.2	0.2
Central-West	4,657	21,423	4.60	36.9	34.1
Mackay	—	1	2.78	—	—
Northern	4	12	2.95	—	—
Far North	—	1	3.44	—	—
North-West	1,251	5,430	4.34	9.4	10.0
Total Queensland	12,228	57,984	4.74	100.0	100.0

(a) Twelve months ended 31 March.

(b) Including crutchings.

(c) At 31 March.

(d) Including Brisbane Statistical Division.

Practically all of the State's wool is produced in the Statistical Divisions of Darling Downs, South-West, Central-West, and North-West. In 1982-83, South-West Division had the highest proportion of the State's wool clip, 37.3 per cent, followed by Central-West, 36.9 per cent, and Darling Downs, 16.1 per cent.

7 DAIRYING

The next table gives particulars of milk cattle, butter and cheese production, and overseas exports of butter and cheese for six years.

DAIRYING, QUEENSLAND

Year	Total milk cattle (a)	Cows, in milk and dry (a)	Production (b)		Overseas exports	
			Butter	Cheese	Butter	Cheese
	No.	No.	'000 kg	'000 kg	'000 kg	'000 kg
1977-78	431,731	287,337	4,837	10,106	1,506	402
1978-79	397,932	265,367	r 5,664	12,562	3,199	563
1979-80	375,044	247,336	r 3,515	11,328	3,993	234
1980-81	364,012	235,516	r 2,795	10,766	1,414	114
1981-82	366,090	234,630	r 3,209	13,623	1,850	235
1982-83	368,729	234,494	p 3,881	p 12,599	1,725	252

(a) At 31 March.

(b) Excluding farm production; Source: Australian Dairy Corporation.

It is now possible under commercial growing conditions to grow mixed-sex flocks to about 2 kilograms average live weight in approximately eight weeks. This increased growth rate has been achieved by selective breeding programs, improved feed conversion efficiency, use of disease control drugs, improved hygiene, more efficient shed design, greater degree of mechanisation, and the introduction of 'whole room' brooding.

Broiler processing firms have encouraged growers to establish farms within a 50 kilometre radius of the processing plants for economy in servicing and transport of chickens and feed. This policy has led to a concentration of growers in areas close to Brisbane and the provincial cities.

The next table shows the number and estimated dressed weight of poultry slaughtered in licensed poultry slaughterhouses.

POULTRY SLAUGHTERED IN LICENSED POULTRY SLAUGHTERHOUSES, QUEENSLAND

Year	Chickens	Other fowls	Ducks and drakes	Turkeys
NUMBER OF BIRDS ('000)				
1977-78	24,962	1,310	15	1
1978-79	28,414	1,340	16	2
1979-80	33,577	1,122	14	5
1980-81	32,390	1,130	14	7
1981-82	31,068	969	13	10
1982-83	34,781	1,151	16	2
ESTIMATED DRESSED WEIGHT ('000 kg)				
1977-78	34,011	2,141	25	2
1978-79	37,721	2,197	29	8
1979-80	44,254	1,610	24	16
1980-81	41,629	1,676	26	22
1981-82	38,964	1,560	24	48
1982-83	43,729	1,914	30	6

9 BEEKEEPING

For the year ended 30 June 1983, the value of production of the beekeeping industry in Queensland was estimated at \$2,854,000, compared with \$2,339,000 in the previous year.

Particulars of beekeeping in Queensland for six years are shown in the next table.

BEEKEEPING (a), QUEENSLAND

Year	Bee-keepers	Beehives			Production		
		Productive during year	Unproductive during year	Total	Honey	Average per productive hive	Beeswax
	No.	No.	No.	No.	'000 kg	kg	'000 kg
1977-78	242	39,652	22,967	62,619	1,834	46.3	32
1978-79	291	48,417	23,928	72,345	2,473	51.1	43
1979-80	342	50,955	27,543	78,498	2,605	51.1	49
1980-81	313	50,470	25,011	75,481	2,375	47.1	51
1981-82	349	53,558	29,670	83,228	3,343	62.4	67
1982-83	396	60,958	24,873	85,831	3,725	61.1	73

(a) Beekeepers with 40 or more hives.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Cattle Breeds (7203.3) (*irregular*)

Livestock and Livestock Products (7221.3) (*annual*)

Crops and Pastures (7321.3) (*annual*)

Fruit (7322.3) (*annual*)

Agricultural Land Use and Selected Inputs (7411.3) (*annual*)

Value of Agricultural Commodities Produced (7501.3) (*annual*)

Central Office Publications

Agricultural Sector, Australia, Structure of Operating Units (7102.0) (*annual*)

Livestock and Livestock Products (7221.0) (*annual*)

Crops and Pastures (7321.0) (*annual*)

Fruit (7322.0) (*annual*)

Agricultural Land Use and Selected Inputs (7411.0) (*annual*)

Value of Agricultural Commodities Produced (7503.0) (*annual*)

Agricultural Industries: Financial Statistics (7507.0) (*irregular*)

Chapter 17

MINING, FORESTRY, AND FISHERIES

1 MINING INDUSTRY

The most important metallic mineral-bearing region of Queensland is in the north-west where major deposits are contained in the Precambrian rocks occurring in the area. The Mount Isa silver-lead-zinc and copper mine, the State's largest producer, is located in this region. Mineral resources are extensive also in the northern and eastern areas of the State, and a wide range of minerals is produced in these areas. The largest coal deposits are located in the Bowen Basin which extends for about 500 kilometres south from Collinsville. Extensive deposits of bauxite occur at Weipa on Cape York Peninsula in the north of the State, and the coastal sand accumulations of southern Queensland contain significant quantities of mineral sands. Significant oil and natural gas reserves exist in far south-west Queensland (Eromanga-Cooper Basin) and the Roma-Surat region (Surat Basin), and gas reserves in the Rolleston region (Bowen Basin). A map showing mineral occurrences in Queensland appears facing page 289. A description of the geology of Queensland is given in Chapter 1, Geography and the Environment, Section 3.

Administration

Sovereign rights to minerals within the boundary of the State are held by the Queensland Government. The Minister for Mines and Energy and the Department of Mines are responsible for the administration of the *Mining Act* 1968–1983 governing the prospecting for, and working of, mineral deposits. Much of the administration and settlement of disputes is delegated to mining wardens who have offices in major centres throughout the State.

The Mining Act provides for the regulation and inspection of all mines. Inspectors have power to enter and inspect, to investigate apparent breaches and dangerous conditions, to order precautions to be taken, and to initiate prosecutions where necessary.

The Queensland Coal Board, constituted under the *Coal Industry (Control) Act* 1948–1978, is responsible for the administration and regulation of the coal mining industry.

Mining Tenements

Leases of land for mining and related purposes, and prospecting permits, are issued by mining wardens, and all such leases and permits are subject to conditions specified in the Mining Act. A description of the various types of mining leases etc. and details of the number and area of leases appear in Chapter 5, Land Settlement, Section 2.

Mineral Royalties

Royalties payable to the Crown on minerals won are prescribed under the *Mining Act* 1968–1983 and Regulations.

The basis on which royalty is assessed differs for the various minerals. In some cases it is an amount per tonne of mineral or concentrate produced, while in other cases a percentage of profits from minerals mined and sold or a percentage of the value of the mineral applies.

Details of the royalties collected are shown in the next table.

ROYALTIES COLLECTED, QUEENSLAND
(Source: Queensland Department of Mines)
(\$'000)

Year	Coal	Other minerals	Petroleum	Total
1978	27,696	22,065	598	50,359
1979	32,509	32,279	853	65,641
1980	(a) 29,384	40,756	1,456	71,596
1981	45,232	30,168	2,129	77,529
1982	51,027	32,862	2,618	86,507
1982-83 (b)	53,226	31,799	3,621	88,647

(a) Decrease due to factors affecting the values on which royalty payments are based.

(b) From 1982-83 figures are compiled on a financial year basis.

Assistance to the Mining Industry

Technical and other forms of assistance to the mining industry are provided by government bodies such as the Queensland Department of Mines, the Queensland Coal Board, the Department of National Development and Energy, and the Commonwealth Scientific and Industrial Research Organisation.

The Department of Mines provides assistance by way of aid to prospectors, grants for maintenance and construction of roads and bridges in mining areas, loans, hire of equipment, and subsidies for mine development. Drilling plants are operated throughout the State and geological field and laboratory services are provided.

The Drilling Branch of the Department of Mines drilled 75,255 metres during 1982 and 55,103 metres during 1982-83, for coal and for stratigraphic, metalliferous, engineering, and environmental purposes to evaluate mineral and energy resources and to obtain other geological information for the State and industry as required.

The Department, which operated, until 30 June 1983, a treatment works at Irvinebank in northern Queensland mainly for processing tin ore produced from small mines in the area, maintains an assay office at Cloncurry in north-western Queensland, a District Geologist's Office at Charters Towers, and has Inspectors of Mines, both metalliferous and coal, stationed at several major centres throughout the State.

During 1982-83, 6,079 tonnes of tin ore were treated at Irvinebank for an output of 75 tonnes of concentrates, compared with 4,329 tonnes of ore treated for 63 tonnes of concentrate output during 1982. Small quantities of other ores and tin dredging tailings were also processed. The assay office at Cloncurry dealt with 1,439 samples and 2,125 assays during 1982-83, compared with 1,535 samples and 2,268 assays during 1982.

Mining Accidents

Particulars of persons involved in accidents, causing death or more than 14 days disablement, in mines, quarries, mills, and smelters in Queensland are given in the next table.

PERSONS INVOLVED IN ACCIDENTS IN MINES ETC., QUEENSLAND
(Source: Queensland Department of Mines)

Year	Mines		Mills, smelters, etc.		Quarries		Total	
	Killed	Injured (a)	Killed	Injured (a)	Killed	Injured (a)	Killed	Injured (a)
1978	4	449	—	31	—	10	4	490
1979	2	469	—	35	—	13	2	517
1980	6	462	1	42	—	11	7	515
1981	1	455	—	32	—	15	1	502
1982	4	348	—	28	1	4	5	380
1982-83 (b)	—	278	—	35	1	3	1	316

(a) Of more than 14 days disablement.

(b) From 1982-83 figures are compiled on a financial year basis.

The Mines Rescue Brigades which operate from Booval on the Ipswich coalfield, Collinsville and Dysart on the Bowen fields, and Blackwater and Moura in central Queensland are organisations equipped to provide services and perform rescue work in Queensland coal mines. The Brigades are staffed by members who volunteer for the service. The control and upkeep of each rescue station is in the hands of a committee of management which consists of representatives of the Department of Mines, the Workers' Compensation Board, colliery proprietors, mine managers, and Mines Rescue Brigade members. Expenses are shared equally by the Department of Mines, the Workers' Compensation Board, and the colliery proprietors.

Coal Miners' Pensions

The *Coal and Oil Shale Mine Workers (Pensions) Act* 1941–1981 provides for the payment of retirement benefits to coal mine workers who retire either by reason of age or incapacity and to the dependants of deceased mine workers.

The revenue of the fund is derived from the Government, the mine workers, and the mine owners. The fund is administered by a tribunal on which the three contributing bodies are represented. At 30 June 1983 there were 8,771 mine workers contributing to the fund and 859 pension recipients, compared with 8,433 contributors and 909 pension recipients at 30 June 1982. During 1982–83 pension payments amounted to \$988,146, compared with \$997,416 for 1981–82. Applications approved for lump sum benefit payments totalled 93, with payments amounting to \$6,804,689 for 1982–83, compared with 61 applications and payments of \$3,603,821 for 1981–82.

2 MINERAL PRODUCTION

Recent Developments

Significant developments relating to individual minerals are as follows.

Aluminium

Production from Queensland's first aluminium smelter at Boyne Island, near Gladstone, commenced in February 1982. This smelter gives Queensland a fully integrated aluminium industry, based on bauxite mined at Weipa and alumina refined at Gladstone. Due to a depressed world aluminium market, plans for a second smelter, located in the Bundaberg district, have been postponed.

Coal

Coal mining remains the most rapidly developing area of Queensland's mining activity, with the main expansion occurring in the Bowen Basin region of central Queensland. The major impetus for expansion has come from export markets. In the past, exports have consisted mainly of coking coal suitable for steel making, but export demand for steaming coal, suitable for electricity generation and other industry, has grown in recent years.

Although there are uncertainties about the future coal export market, annual coal output for the State is seen as continuing to increase in the coming years. A number of new mine construction and expansion projects are scheduled to become operational by 1985 in order to meet negotiated export and domestic contracts. Domestic usage is expected to increase, mainly for electricity generation and possibly for conversion to liquid fuels.

In October 1982, mining operations commenced at the Boundary Hill steaming coal deposit to supplement deliveries to the Gladstone and Callide Power Stations and the Gladstone Alumina Refinery. During 1983, coking coal exports commenced from the new Oaky Creek open-cut mine, development of the open-cut Meandu steaming coal mine to supply the adjacent Tarong Power Station was completed, and the Curragh coal deposit was brought into production to supply the Gladstone Power Station and, ultimately, a new power station at

Stanwell, as well as to produce coking coal for export. Other developments scheduled for 1984 are: the commencement of steaming coal exports from major expansion of open-cut operations at Blair Athol; coking coal exports from the new Riverside open-cut mine; coking coal exports from major expansion of open-cut operations at Collinsville; and steaming coal exports from the new open-cut Newlands Mine.

Large reserves of coal suitable for conversion to liquid fuel exist in the Taroom, Wandoan, and Millmerran areas. Feasibility studies on the conversion potential of these coals have been undertaken and favourable results of process testing reported.

To meet current and potential increases in export sales, existing coal port facilities have been improved or expanded at Brisbane and Gladstone and new facilities constructed at Dalrymple Bay, adjoining Hay Point, and Abbot Point, north of Bowen. First shipments from the new coal loading facility at Fisherman Islands, Brisbane, took place in February 1983. Construction of the new terminals at Dalrymple Bay and Abbot Point is continuing with first shipments from both scheduled for early 1984.

Estimates by the Department of Mines of total recoverable reserves of black coal in Queensland at June 1983 amounted to 5,560m tonnes of coking coal and 8,250m tonnes of non-coking coal.

Copper

At the Mount Isa Mine, development work has commenced to gain access to the deep 3,000 copper ore body. This forms part of a project which will considerably extend the life of the mine.

Gemstones

In the Anakie gemfield area sapphire mining is currently estimated to be worth \$15m a year. In addition precious opal is found in western Queensland and chrysoprase is mined commercially in the Marlborough district.

Gold

A plant has been operating since September 1982 to recover gold from tailings dumps at Mount Morgan, where mining operations ceased in 1981.

Lead

Trial mining continued at the Hilton mine which is scheduled to feed silver-lead-zinc ore to Mount Isa on a pilot basis by 1985. Full-scale production is expected in the early 1990s.

Limestone

The mining of limestone, to supply a cement clinker plant at Gladstone, commenced at Mount Larcom in 1981.

Oil Shale

Research has continued on an 'oil from shale' project at Rundle, near Gladstone. A number of other oil shale deposits in Queensland are also under investigation.

Petroleum

The increase in the level of onshore petroleum exploration has continued with surveys and drilling being carried out in the Surat, Bowen, Galilee, and Eromanga-Cooper Basins.

Since late 1981, significant discoveries have been made in the Eromanga-Cooper Basin at the Jackson oilfields. An underground pipeline from the Jackson fields to connect with the existing Moonie to Brisbane pipeline is scheduled to be operational by mid-1984.

Phosphate

Work was resumed in 1981 at the phosphate mine near Duchess which had been on a care and maintenance basis since mid-1978. Actual mining activity again ceased in late 1982 and processing of extracted rock stockpiles was completed early in 1983.

Uranium

Mary Kathleen, which was the only producing uranium mine in Queensland, ceased operations in October 1982 with the exhaustion of economically recoverable reserves. Exploration continues in other areas, however, and at Ben Lomond, near Townsville, ore has been extracted for further investigation.

Mineral Production Statistics

Mineral production statistics which are shown in the following tables cover production by all producers whether they are classified as mining establishments, as defined in Section 3, or not.

The figures are derived from information supplied in returns to the various State Mines Departments and to the Australian Bureau of Statistics, supplemented in some cases by information from other sources.

The statistics on contents of metallic minerals, as shown in the table below, are based on assay. No allowance has been made for losses in smelting and refining and the quantities shown are therefore, in general, greater than the contents actually recovered.

The next table shows the quantities of principal minerals produced in Queensland for the six years to 1981-82. A long-term summary of minerals and principal metallic contents is given in the Appendix.

PRODUCTION OF PRINCIPAL MINERAL PRODUCTS, QUEENSLAND

Mineral	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Metallic minerals						
Bauxite '000 tonnes	9,982	8,957	8,095	9,377	7,937	8,705
Copper (a) '000 tonnes	156	160	174	170	170	175
Gold (a) kilograms	1,212	990	635	480	901	824
Lead (a) '000 tonnes	173	163	158	151	140	171
Silver (a) '000 kilograms	489	469	476	428	406	455
Tin (a) tonnes	1,454	2,061	2,030	2,725	2,999	3,147
Titanium dioxide (a) (from rutile concentrate) .. '000 tonnes	84	36	50	89	83	74
Uranium concentrate .. tonnes	501	508	701	837	862	935
Zinc (a) '000 tonnes	121	120	128	123	116	152
Zirconium dioxide (a) '000 tonnes	42	27	36	50	48	39
Fuel minerals						
Black coal '000 tonnes	25,544	25,416	26,507	27,233	32,356	34,276
Crude oil (b) '000 cu m	64	62	69	81	82	78
Natural gas m cu m	236	288	285	322	330	375
Construction materials						
Sand '000 tonnes	4,597	4,109	4,315	5,014	5,553	6,819
Gravel '000 tonnes	5,210	3,213	3,225	3,297	3,289	3,858
Crushed and broken stone '000 tonnes	7,561	10,779	11,219	12,545	14,467	18,174
Other non-metallic minerals						
Brick clay and shale .. '000 tonnes	1,027	987	1,084	1,195	1,051	957
Limestone (c) '000 tonnes	1,791	1,841	1,649	1,705	1,943	2,367
Silica '000 tonnes	512	463	543	655	677	634

(a) Content of mine output before smelting.

(b) Including natural gas condensate.

(c) Including shell and coral.

The value, at mine, of the major groups of minerals produced in Queensland and Australia is shown in the next table.

VALUE, AT MINE, OF MINERALS PRODUCED, MAJOR GROUPS, QUEENSLAND AND AUSTRALIA (\$m)

Mineral group	Queensland						Australia
	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1981-82
Metallic minerals	420.4	412.1	597.6	904.6	760.4	656.0	3,330.5
Coal	683.4	681.2	703.3	820.2	1,003.2	1,226.1	3,091.1
Petroleum (a)	3.9	6.4	7.7	13.7	24.2	29.7	1,780.0
Construction materials	44.5	51.2	54.0	67.2	87.4	123.6	609.9
Other non-metallic minerals	37.6	40.7	42.6	46.8	42.4	54.3	281.6
Total	1,189.7	1,191.6	1,405.1	1,852.5	1,917.6	2,089.8	9,093.0

(a) Including crude oil, natural gas, and natural gas condensate.

3 MINING ESTABLISHMENTS

Statistics of mining establishments are collected by way of an annual mining census which is conducted on an integrated basis with other economic censuses, e.g. census of manufacturing establishments.

Definitions

Mining is defined as including the extraction of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum, or gases such as natural gas, by such processes as underground mining, open-cut extraction, quarrying, operation of wells or evaporation pans, dredging, or recovering from ore dumps or tailings. Activities such as dressing or beneficiating ores or other minerals by crushing, milling, screening, washing, flotation, or other, including chemical, beneficiation processes or briquetting are included because they are generally carried out at or near mine sites as an integral part of mining operations. Natural gas absorption and purifying plants are also included. Excluded are establishments mainly engaged in refining or smelting minerals or ores, other than preliminary smelting of gold, or in the manufacture of such products of mineral origin as coke, cement, and fertilisers.

Small part-time-operated mines and itinerant miners, particularly in the gemstone industry, are excluded from the census but their exclusion has minimal effect on the data, except in the case of number of establishments and number of working proprietors.

Establishments. In accordance with the Australian Standard Industrial Classification (ASIC) the basic census unit (the establishment) in respect of which statistics are collected in various industry censuses, is, in general, a unit covering all the operations carried on at a single physical location under the ownership of one enterprise. A mining establishment is one predominantly engaged in mining but the data collected for it relate to, with a few exceptions, all activities at the location. Establishment statistics also include data relating to locations not yet in operation, which are classified on the basis of their intended main activity, and to separately located administrative offices and ancillary units serving the establishment and forming part of the business which owns and operates the establishment.

Employment. Working proprietors and employees on the pay-roll including those working at separately located administrative offices and ancillary units.

Wages and salaries relate to all employees of the establishment, including those working at separately located administrative offices and ancillary units. Drawings of working proprietors are excluded.

Turnover covers sales of minerals (net of coal export levy and petroleum production excise duty payments) and other goods whether produced by the establishment or not, plus transfers out of minerals and other goods to other establishments of the same enterprise, plus bounties and subsidies on production, plus all other operating revenue from outside the enterprise (such as commission, repair and service revenue, and, from 1978-79, rent, leasing, and hiring revenue),

plus capital work done for own use, or for rental or lease. Receipts from interest, royalties, dividends, and the sale of fixed tangible assets are excluded.

Stocks include all stocks of materials, fuels, mine products, and work-in-progress of the establishment whether located at the establishment or elsewhere.

Purchases, transfers in, etc. cover purchases of electricity, fuels, power, containers, etc., and minerals and other goods for resale, plus transfers in of goods from other establishments of the same enterprise, plus charges for processing and other commission work and payments to mining contractors, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses, and sales commission payments and, from 1978–79, rent, leasing, and hiring expenses.

Value added is defined as turnover plus increase (or less decrease) in the value of stocks, less purchases, transfers in, and selected expenses.

Fixed capital expenditure covers outlay on new and second-hand fixed tangible assets, less disposals, and includes fixed capital expenditure on mining establishments not yet in operation.

Summary of Operations

The next table gives a summary of selected details of operations of mining establishments.

MINING ESTABLISHMENTS (a), SUMMARY OF OPERATIONS, QUEENSLAND

Year	Establishments	Persons employed (b)		Wages and salaries	Turnover	Purchases, transfers in, and selected expenses	Value added	Fixed capital expenditure
		Males	Females					
	No.	No.	No.	\$m	\$m	\$m	\$m	\$m
1976–77	225	14,627	961	218.7	1,292.7	419.1	896.1	119.0
1977–78	244	14,123	886	228.1	1,441.4	449.7	985.9	142.9
1978–79	241	14,095	946	258.1	1,553.5	439.3	1,137.2	329.9
1979–80	242	15,705	1,085	299.1	1,995.6	526.6	1,510.8	318.3
1980–81	256	16,384	1,210	343.5	2,072.7	636.9	1,445.9	395.3
1981–82	297	16,736	1,246	423.3	2,307.1	869.6	1,510.6	526.7

(a) Excluding mineral exploration and services to mining.

(b) At end of year. Including working proprietors.

A comparison of Queensland mining industry data with total Australian figures is provided in the following table.

MINING ESTABLISHMENTS (a), SUMMARY OF OPERATIONS, QUEENSLAND AND AUSTRALIA, 1981–82

Particulars	Queensland						Australia
	Metallic minerals	Coal	Petroleum (including natural gas)	Construction materials	Other non-metallic minerals	Total	
Establishments No.	59	27	9	165	37	297	1,491
Persons employed (b)							
Males No.	6,524	8,276	88	1,394	454	16,736	74,631
Females No.	657	409	11	133	36	1,246	5,100
Total No.	7,181	8,685	99	1,527	490	17,982	79,731
Wages and salaries \$m	163.5	225.0	1.4	23.8	9.6	423.3	1,881.4
Turnover \$m	665.5	1,429.4	35.2	141.8	35.2	2,307.1	10,183.3
Stocks at 30 June							
Opening \$m	89.7	135.5	3.2	7.0	12.1	247.6	1,075.0
Closing \$m	102.6	190.8	4.1	7.9	15.2	320.6	1,349.8
Purchases, transfers in, and selected expenses \$m	263.9	499.7	4.8	78.9	22.3	869.6	3,775.7
Value added \$m	414.5	985.0	31.3	63.8	16.0	1,510.6	6,682.4
Fixed capital expenditure .. \$m	80.4	417.3	9.4	15.4	4.2	526.7	2,652.1

(a) Excluding mineral exploration and services to mining.

(b) At end of year. Including working proprietors.

4 MINERAL AND PETROLEUM EXPLORATION

Mineral Exploration

The Mineral Exploration Census is conducted annually. Each organisation engaged in exploration submits a separate return in respect of its activities in each State or Territory.

Mineral exploration is defined as consisting of the search for and/or appraisal of new ore occurrences and known deposits of minerals, including extensions to deposits being worked, by geological, geophysical, geochemical, and other methods, including drilling. It excludes mine development activities carried out primarily for the purpose of commencing or extending mining and quarrying operations, and exploration for water.

Exploration expenditure, capitalised expenditure as well as working expenses, includes expenditure on aerial surveys, general surveys, report writing, map preparation, and other activities indirectly attributable to exploration.

The next table shows details of private mineral exploration in Queensland.

PRIVATE MINERAL EXPLORATION, QUEENSLAND

Year	Expenditure			Metres drilled		
	On drilling	Other (a)	Total	Core (b)	Non-core (c)	Total
	\$'000	\$'000	\$'000	'000 metres	'000 metres	'000 metres
1976-77	5,520	15,797	21,317	70	255	325
1977-78	11,903	24,086	35,989	131	499	631
1978-79	10,786	27,010	37,796	109	565	674
1979-80	14,430	48,063	62,493	176	577	753
1980-81	25,318	71,532	96,850	244	812	1,057
1981-82	30,272	94,704	124,976	247	880	1,127

(a) Including geological etc. adits, shafts, etc.

(b) Diamond drilling or any kind of drilling in which drill cores are taken.

(c) Alluvial

percussion and other drilling in which drill cores are not taken.

The following table shows private expenditure on general mineral exploration in Queensland according to type of expenditure.

PRIVATE MINERAL EXPLORATION EXPENDITURE, QUEENSLAND
(\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Salaries and wages paid						
On production leases	1,155	790	1,037	1,338	1,839	2,478
On other licensed areas and for other exploration	5,162	6,913	7,789	11,677	16,727	23,273
Total	6,317	7,703	8,825	13,014	18,566	25,751
Materials and stores purchased						
On production leases	541	172	267	741	513	778
On other licensed areas and for other exploration	1,322	2,102	2,557	4,046	6,868	8,252
Total	1,862	2,274	2,824	4,788	7,381	9,030
Payments to contractors						
On production leases	807	212	1,699	1,001	3,754	3,932
On other licensed areas and for other exploration	4,103	12,304	10,385	17,777	33,584	42,573
Total	4,910	12,516	12,084	18,777	37,338	46,506

PRIVATE MINERAL EXPLORATION EXPENDITURE, QUEENSLAND—continued
(S'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Other current expenditure						
On production leases	545	818	1,202	2,079	1,734	1,824
On other licensed areas and for other exploration	6,555	10,785	11,380	18,843	26,935	36,177
Total	7,100	11,604	12,581	20,922	28,669	38,001
Net capital expenditure (a)						
On production leases	65	272	19	445	926	598
On other licensed areas and for other exploration	1,063	1,620	1,463	4,546	3,970	5,090
Total	1,128	1,892	1,482	4,991	4,896	5,688
Total private exploration						
On production leases	3,113	2,265	4,223	5,603	8,766	9,611
On other licensed areas and for other exploration	18,204	33,725	33,573	56,890	88,084	115,365
Total	21,317	35,989	37,796	62,493	96,850	124,976

(a) Expenditure, less disposals.

Petroleum Exploration

Petroleum exploration consists of the search for and/or appraisal of deposits of crude oil and/or natural gas and natural gas liquids by geological, geophysical, geochemical, and other exploration methods, including drilling. Included in the expenditure are the costs of drilling exploratory oil and/or gas wells and the testing of such wells. Also included are the costs of access roads, site construction, etc. which are undertaken primarily for purposes of exploration for deposits of petroleum. Details of developmental oil and/or gas wells and expenditure on production facilities and pipelines, and production costs etc. are excluded.

Statistics contained in the tables have been collected and compiled by the Bureau of Mineral Resources, Geology, and Geophysics, Canberra.

PETROLEUM EXPLORATION, WELLS DRILLED, QUEENSLAND
(Source: Commonwealth Bureau of Mineral Resources, Geology, and Geophysics)

Particulars	1977	1978	1979	1980	1981	1982
Wells drilled (a)						
As oil producers No.	—	1	1	1	6	14
As gas producers No.	—	2	3	15	14	22
Plugged and abandoned No.	—	13	18	23	55	54
Total No.	—	16	22	39	75	90
Average final depth of wells drilled .. metres	—	1,655	1,676	1,624	1,895	1,767
Metres drilled						
Completed wells metres	—	26,483	36,873	63,350	140,997	152,115
Uncompleted holes metres	—	1,229	—	1,491	6,920	3,847
Total metres	—	27,712	36,873	64,841	147,917	155,962

(a) Figures relate to drilling operations during the current year, irrespective of the year in which drilling commenced.

An analysis of private expenditure on petroleum exploration in Queensland, according to the type of exploration, is shown in the next table. Government expenditure on petroleum

exploration in Queensland is not available. However, throughout Australia, 1981 expenditure by government authorities amounted to about \$5.6m.

PRIVATE EXPENDITURE (a) ON PETROLEUM EXPLORATION, QUEENSLAND
(Source: Commonwealth Bureau of Mineral Resources, Geology, and Geophysics)
(\$'000)

Particulars	1976	1977	1978	1979	1980	1981
Geological	355	948	1,243	1,251	1,785	2,637
Geophysical	248	1,106	4,368	8,294	24,352	47,486
Drilling	3,120	—	3,127	4,581	16,490	35,134
Other	298	166	1,174	2,035	2,909	4,547
Total	4,021	2,220	9,912	16,161	45,536	89,803
Payments under <i>Petroleum Search Subsidy Act</i> 1959	94	—	—	—	—	—

(a) Including expenditure financed by payments under *Petroleum Search Subsidy Act* 1959.

5 FORESTRY

The Department of Forestry

As a renewable resource, forests represent an extremely valuable asset to Queensland. Around 2 per cent of the State's area is controlled by the Department of Forestry.

The development and management of the forest estate is the most important function of the Department. The concept of multiple use management is employed to ensure that the best long-term use of the forest is maintained. Multiple uses include: logging, water catchment protection, stock grazing, wildlife habitat protection, and recreation. Each use requires careful planning, therefore effective land use policies and practices have been developed, and are continually upgraded.

The Department of Forestry promotes the development and stability of the timber industry, and undertakes research into its needs. An extension service provides the public and industry alike, with advice on all aspects of timber utilisation.

The Forest Estate

The areas under the control of the Department are set out in the following table. State Forests are the only areas of Crown lands permanently reserved for timber production.

FORESTS AND TIMBER RESERVES, QUEENSLAND, AT 30 JUNE 1983
(Source: Queensland Department of Forestry)

Statistical Division (a)	State forests		Timber reserves	
	No.	hectares	No.	hectares
Moreton (b)	74	244,644	12	8,066
Wide Bay-Burnett	149	923,381	43	57,729
Darling Downs	90	972,491	6	7,300
South-West	40	338,913	1	19,653
Fitzroy	50	622,412	15	147,235
Mackay	23	115,540	11	27,722
Northern	18	288,209	2	798
Far North	30	363,841	24	302,598
Queensland	474	3,869,431	114	571,101

(a) Allocated to Statistical Divisions according to location of Forestry Sub-district boundaries.

(b) Including Brisbane Statistical Division.

Forest Resources

Timber resources are obtained from both native and plantation forests.

Native forests can be classified into three broad areas: hardwood forest, cypress pine forest, and rainforest. The majority of the commercial hardwood forest is restricted to the coastal belt where rainfall exceeds 750 mm a year. The hardwood estate is estimated to cover 4,634,000 hectares of which 3,238,000 hectares are under Crown control. Cypress pine forests, situated in the central and western regions of the State, cover about 1,685,000 hectares of which 1,496,000 hectares are under Crown control. The rainforest estate, located mainly in north Queensland, is estimated to cover 1,185,000 hectares of which 783,000 hectares are under Crown control.

The total area of softwood plantations at 31 March 1983 was 141,515 hectares, comprising 98,738 hectares of exotic pines and 42,777 hectares of native species, mainly hoop pine. The major hoop pine plantation resource is located within the Moreton, Wide Bay-Burnett, and Darling Downs Statistical Divisions. The exotic pine plantations are located mainly on the coastal lowlands extending from Brisbane to Cairns.

Sawmills Licensing

Departmental control of log timber processing, through the *Sawmills Licensing Act* 1936-1979, ensures that Crown and private timber is utilised only in areas where resources can support economic production. In 1969 the Department introduced a policy which permitted the amalgamation of licensed sawmills so that mills with insufficient supplies could amalgamate with other sawmills within defined zones. In 1969 there were 517 licensed mills and at the end of 1982-83 the number of mills had declined to 362.

Forest Management

Statistics relating to the forest estate, operational matters, and marketing of forest products in Queensland are shown in the next table.

OPERATIONS OF FORESTRY DEPARTMENT, QUEENSLAND
(Source: Queensland Department of Forestry)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Forest estate (a)						
State forests (permanent) .. '000 ha	3,444	3,610	3,716	3,713	3,829	3,869
Timber reserves (temporary) '000 ha	616	589	595	584	572	571
Reforestation						
Area of plantations (b) .. '000 ha	113	120	127	133	139	143
Area treated for natural regeneration to date (a) '000 ha	457	470	479	487	496	505
Nurseries (a) number	14	15	15	14	14	13
Harvesting and marketing						
Milling timber (c)						
Native forest cu m	561,896	562,035	636,338	590,039	575,260	406,274
Plantation cu m	164,730	163,520	197,272	239,382	223,347	152,965
Pulp wood (c) cu m	105,963	71,189	88,378	113,578	79,826	56,667
Sleepers pieces	304,313	268,308	328,368	344,789	355,578	340,129
Railway timbers (c) cu m	1,897	692	873	460	7,948	1,783
Bridge timbers m	22,777	22,000	21,444	18,437	20,923	29,159
Girder logs (c) cu m	941	583	n.a.	n.a.	n.a.	n.a.
Poles m	62,256	91,380	127,401	112,862	192,511	78,089
Fencing timber						
Round m	99,440	84,741	102,894	144,561	124,031	173,928
Split pieces	111,716	135,527	255,788	259,917	258,489	250,143
Mining timber						
Round m	90,875	92,488	94,247	57,740	84,713	96,388
Sawn (c) cu m	178	292	412	4,788	438	706
Other pieces	4,877	4,462	3,280	4,368	1,408	1,873
Fuelwood tonnes	7,053	4,729	3,280	4,706	4,141	3,815

(a) At 30 June. (b) At 31 March. (c) Gross measure.

Planning and Uses of State Forests

State Forests are managed for many uses and long-term planning is essential to avoid conflicts of use, as well as ensuring suitable development of a resource that can take decades to attain sizes suitable for production.

Community use of forests for recreation continues to expand. An estimated 800,000 picnickers and campers visited State Forest Parks and forest drives in 1982-83. Many others enjoyed bushwalking, horse riding, driving, and other informal activities, under permit, in the undeveloped areas of State Forests.

Reforestation

The work of the Department of Forestry in reforestation aims at making provision for the timber requirements of the State. It falls naturally into two classes, namely, establishment of plantations of softwoods and the improvement of natural stands of hardwoods, cypress pine, and the cabinet woods of northern Queensland.

The softwood planting program is designed to achieve three main objectives: (a) the establishment of sufficient softwood plantations to meet the shortfall between the anticipated demand for wood products (other than pulp and paper) and the available supply from native forests, private plantations, and competitive external sources by the year 2000; (b) the location of plantations close to the major market centres within the State, particularly along the coast, to cater for Queensland's highly decentralised development; and (c) the development of a large-scale, integrated, wood-using industry in the Gympie-Maryborough region, including a pulp and paper mill.

The next table shows the distribution of reforestation work throughout the State and the main species within each area.

REFORESTATION IN QUEENSLAND, 1982-83
(Source: Queensland Department of Forestry)
(hectares)

Particulars	Statistical Division (a)								Total
	Moreton (b)	Wide Bay- Burnett	Darling Downs	South- West	Fitzroy	Mackay	Northern	Far North	
Area of plantations established (c)									
Hoop pine	181	222	106	—	—	—	—	2	511
Other native conifers	—	1,110	4	—	—	—	—	—	1,114
Slash pine	—	2,063	25	—	136	—	534	172	3,187
Other exotic conifers	—	—	—	—	—	—	—	—	—
Broadleaf species	—	—	—	—	—	—	—	—	—
Miscellaneous experimental (d) ..	—	—	—	—	—	—	17	—	17
Total	438	3,395	135	—	136	—	551	174	4,829
Net area of effective plantations (e)									
Hoop pine	20,212	13,283	7,334	—	9	252	2	1,021	42,113
Other native conifers	349	143	62	—	1	1	—	108	664
Slash pine	13,721	51,257	603	—	1,006	2	1	3	66,593
Other exotic conifers	5,044	13,071	3,327	—	4,658	515	4,316	1,196	32,127
Broadleaf species	561	824	110	—	1	1	3	165	1,665
Miscellaneous experimental (d) ..	41	37	25	—	3	1	20	10	137
Total	39,928	78,615	11,461	—	5,678	772	4,342	2,503	143,299
Natural forests treated									
Eucalypts	479	385	5	—	—	—	—	—	869
Cypress pine	—	—	4,813	2,923	—	—	—	—	7,736
Cypress pine and eucalypts mixed ..	—	—	—	—	—	—	—	—	—
Rainforest	—	—	—	—	—	—	—	—	—
Total	479	385	4,818	2,923	—	—	—	—	8,605

(a) Allocated to Statistical Divisions by location of Forestry Sub-district boundaries.
(c) During year ended 31 March.

(d) Including silky oak, maple, red cedar, etc.

(b) Including Brisbane Statistical Division.
(e) At 31 March.

The principal native species planted is hoop pine, which grows naturally in the rainforests of southern Queensland, and this species accounts for approximately 30 per cent of the total area planted. Growth in plantations has proved satisfactory and, on average sites, the selected high pruned trees attain an average height of 25 m and an average diameter of 270 mm by the age of 25 years.

Other native species planted to a lesser extent are bunya pine, kauri pine, silky oak, and Queensland maple. These plantings are confined to areas of rich soil which originally carried rainforests. Centres of operations include the Brisbane Valley, the Mary Valley, Nanango, Kilcoy, Kilkivan, Kalpowar, and the Atherton Tableland.

The chief exotic species planted is slash pine, which is native to the south-east of the United States, and has proved suitable for planting over a wide range along the eastern coastal plain from the New South Wales border to Bundaberg; within the tropics, plantings are of Caribbean pine. Other species planted to a lesser degree include patula, loblolly, and radiata pines. Centres of exotic plantings are Passchendaele, Pechey, Beerburrum, Toolara, Tuan, Binger-Gregory, Bowenia, Cathu, Kennedy, Danbulla, Kuranda, and Ingham.

To achieve the maximum quantity of high quality wood consistent with a reasonably high total production of merchantable timber, planting spacings of mainly 5.0 m by 2.1 m are adopted and early thinnings are applied to promote the growth of the best trees.

Marketable thinnings commence between 12 and 15 years of age, and the timber so yielded has become important to the State. The first sale of thinnings was made in 1942. In 1982-83, 152,965 cubic metres were marketed and a further 56,667 cubic metres were marketed as pulpwood.

The improvement of the natural forests is effected by silvicultural treatments, which are designed to secure adequate regeneration of the best species and to improve their representation in the forest by the removal of non-commercial species.

The Department conducts an advisory service for engineers, architects, builders, and the public in general on the appropriate uses and identification of timbers. It also administers the *Timber Users' Protection Act* 1949-1972, which regulates the sale and use of certain timbers and the preservative treatment of timber.

Research

A comprehensive research program into the broad areas of plantation species, native and plantation forests, forest protection, and forest products, is also carried out by the Department.

Parallel with silvicultural research, the Department of Forestry maintains a program of forest products research to ensure the provident use of the existing resources, and the production of wood having qualities suitable for the needs of the State.

Co-operation with other research organisations also plays a significant role in the overall aim of forest development and management.

6 TIMBER PRODUCTION

Although Queensland is endowed with variety and quality in timber species, other varieties of hardwood and softwood timbers are imported from various countries, mainly Malaysia, New Zealand, United States, and Canada.

The native timbers are chiefly in two large and widely separated areas. In the south, the timber country extends from the border ranges to beyond Maryborough. This is the main pine-hardwood belt, which extends also to the margins of the sub-tropical region in New South Wales. The most important forest species are cypress pine, ironbark, and spotted gum. In the north, the 'rainforest' or jungle timbers comprise, in addition to pine, a variety of first-class

cabinet woods which are used for veneers, furniture, and joinery. Queensland walnut, maple, silkwood, black bean, silky oak, silver ash, and some others are well known. There are varieties of lesser-known woods of intrinsic value which are appreciated on the timber markets.

Sawmilling Operations

The quantity of log timber processed by all mills in Queensland, including those which operated only intermittently, is shown in the following table.

From 1978-79 the gross volume measure has been used in reporting cubic metres of logs processed. Previously true volume net measure was used.

LOG TIMBER PROCESSED (a), QUEENSLAND
(cubic metres)

Species	1977-78	1978-79 (b)	1979-80	1980-81	1981-82	1982-83
From native forests						
Conifers: Hoop, bunya, and kauri ..	55,995	56,827	59,690	57,151	42,694	30,764
Cypress	175,644	196,437	197,767	198,369	185,936	120,207
Other	1,227	1,211	1,108	6,300	1,684	3,743
Forest hardwoods	538,813	586,452	617,999	611,911	614,042	558,548
Rainforest structural timbers	69,205	72,217	78,205	92,909	79,843	68,195
Cabinet woods: Prime	41,283	39,834	44,013	36,454	33,467	29,291
Other	60,454	56,515	59,094	63,439	56,466	44,203
From plantations						
Conifers: Hoop, bunya, and kauri ..	99,108	92,335	108,058	119,133	116,975	81,871
Other	173,476	166,854	207,981	219,029	208,835	148,313
Non-coniferous	—	26	339	243	472	250
Imported	7,992	6,569	3,756	—	1,120	569
Total	1,223,197	1,275,277	1,378,010	1,404,938	1,341,534	1,085,954

(a) Including logs processed for wood pulp, wood-wool, hardboard, and particle board.
has changed from true volume net measure to gross volume.

(b) From 1978-79, the basis of measurement used

The next table shows details of the output of each of the main species of timber, by sawmills and by plywood mills, veneer mills, etc.

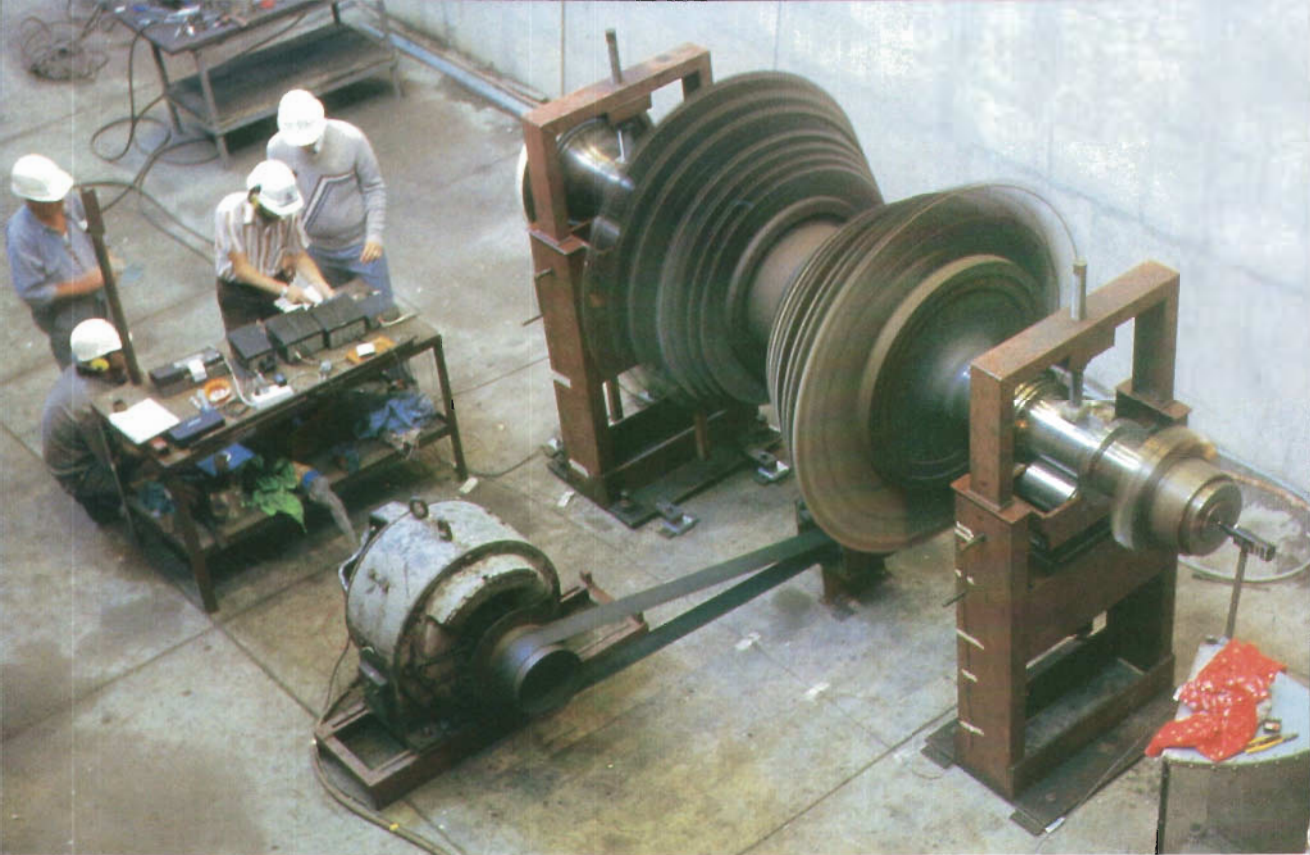
LOG TIMBER PROCESSED BY SPECIES AND TYPE OF MILL, QUEENSLAND, 1982-83
(cubic metres)

Species	Sawmills with quarterly capacity (cubic metres) of			Plywood, veneer, etc. mills	Total
	Under 900	900 and under 2,700	2,700 and over		
From native forests					
Conifers: Hoop, bunya, and kauri ..	2,010	13,444	9,931	5,379	30,764
Cypress	11,209	64,463	44,535	—	120,207
Other	1,887	970	713	173	3,743
Forest hardwoods	91,431	159,972	239,988	67,157	558,548
Rainforest structural timbers	2,253	8,339	50,060	7,543	68,195
Cabinet woods: Prime	738	1,421	15,566	11,566	29,291
Miscellaneous	2,749	2,840	19,994	18,620	44,203
From plantations					
Conifers: Hoop, bunya, and kauri ..	67	2,187	68,532	11,085	81,871
Other	814	22,034	50,844	74,621	148,313
Non-coniferous	250	—	—	—	250
Imported	3	—	8	558	569
Total	113,411	275,670	500,171	(a) 196,702	1,085,954

(a) Including 144,926 cubic metres of logs processed by mills for the production of wood pulp, wood-wool, hardboard, and particle board.



Twin cooling towers dominate the construction site of the Tarong Power Station



MANUFACTURING INDUSTRY—Chapter 18

Photo: Queensland Electricity Generating Board

Dynamic balancing of a turbine, Tarong Power Station

HOUSING AND CONSTRUCTION—Chapter 15

Photo: State Public Relations Bureau

A panoramic view of Brisbane



Selected details of the operations of establishments engaged in log sawmilling are set out in the next table.

MANUFACTURING ESTABLISHMENTS (a): LOG SAWMILLING, QUEENSLAND

Particulars		1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Establishments in operation at end of June .. No.		200	185	176	180	174	173
Employment (b), average over whole year .. No.		2,631	2,667	2,597	2,793	2,731	2,949
Wages and salaries (c) \$'000		18,850	19,979	20,310	24,061	26,032	33,008
Turnover (d) \$'000		59,289	65,438	65,653	83,651	100,634	112,230
Value added \$'000		33,091	38,106	33,534	42,436	51,873	57,606
Fixed capital expenditure \$'000		1,967	1,381	1,865	1,780	1,539	2,310

(a) Excluding single-establishment manufacturing enterprises with fewer than four persons employed.

(b) Including working proprietors.

(c) Excluding drawings of working proprietors.

(d) Including transfers out and other operating revenue.

Selected details of the operations of establishments engaged in the manufacture of plywood, veneer, and manufactured boards are shown in the next table.

MANUFACTURING ESTABLISHMENTS (a): PLYWOOD, VENEER, AND MANUFACTURED BOARDS OF WOOD, QUEENSLAND

Particulars		1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Establishments in operation at end of June .. No.		22	22	23	22	24	19
Employment (b), average over whole year .. No.		1,574	1,828	1,691	1,610	1,816	1,403
Wages and salaries (c) \$'000		12,760	15,551	16,525	16,367	20,405	16,030
Turnover (d) \$'000		53,142	60,040	59,627	73,262	83,098	76,218
Value added \$'000		24,936	28,367	26,341	30,718	36,920	31,830
Fixed capital expenditure \$'000		945	788	932	-35	1,111	935

(a) Excluding single-establishment manufacturing enterprises with fewer than four persons employed.

(b) Including working proprietors.

(c) Excluding drawings of working proprietors.

(d) Including transfers out and other operating revenue.

7 FISHERIES

Due to Queensland Government administrative changes, statistics for 1981-82 and 1982-83 are not available. Statistics for 1983-84 are to be supplied by the regulatory body, the Queensland Fish Management Authority.

The prawn catch is the principal seafood product landed in Queensland and in 1980-81 represented about 85 per cent of the total value of edible fisheries production. The main trawling grounds are located in the Gulf of Carpentaria and in waters off the south-eastern Queensland coast. A substantial part of the prawn catch is exported overseas.

A wide range of fish is taken from waters around the Queensland coast, the most important edible fish caught being mullet, mackerel, bream, whiting, and giant perch (barramundi). In addition to the edible fisheries industry there exists a commercial pearl-shell and cultured pearl industry which is located in Torres Strait to the north of the Queensland mainland.

Production

The next table gives details of commercial production for six years. The operations of the Fish Board are given in Chapter 20, Marketing, Section 12.

EDIBLE FISHERIES PRODUCTION (a), QUEENSLAND
(Source: Queensland Department of Primary Industries)

Product	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
QUANTITY (b) (tonnes)						
Fish	5,313	5,425	5,697	5,085	4,762	(c) 4,864
Crabs	380	432	481	425	431	550
Lobsters etc.	(d) 60	(d) 48	(d) 126	278	(d) 247	(d) 296
Oysters	n.a.	n.a.	n.a.	(e)	n.a.	n.a.
Prawns	6,646	11,702	8,428	10,044	10,579	14,448
Scallops	912	494	2,737	3,232	1,394	2,596
Squid	90	82	120	113	197	204
Other molluscs	—	—	1	2	2	—
VALUE (\$'000)						
Fish	4,656	5,298	6,067	6,351	7,073	(c) 7,036
Crabs	713	1,022	1,187	1,225	1,261	1,946
Lobsters etc.	(d) 102	(d) 124	(d) 238	703	(d) 479	(d) 526
Oysters	n.a.	n.a.	n.a.	288	n.a.	n.a.
Prawns	10,451	26,944	30,029	47,656	51,850	73,118
Scallops	366	219	1,502	1,827	1,800	3,385
Squid	64	88	119	161	323	281
Other molluscs	—	—	1	3	4	—
Total edible	16,351	33,695	39,143	58,214	62,789	86,292

(a) Excluding fresh water fish and also excluding oysters for all years excepting 1978-79.

(b) Live weight.

(c) Excluding shark.

(d) Excluding rock lobsters.

(e) 288,000 bags.

The major edible species of fish landed in Queensland are shown in the next table.

FISHERIES PRODUCTION (a) BY SPECIES: FISH, CRUSTACEANS, AND MOLLUSCS, QUEENSLAND
(Source: Queensland Department of Primary Industries)
(tonnes)

Species (common name)	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Bream (including tarwhine)	311	280	274	244	158	229
Cod and coral trout	247	174	174	174	206	201
Emperor and red emperor	288	223	163	205	222	38
Flathead	96	80	83	80	69	61
Garfish	42	36	39	54	33	44
Giant perch (barramundi)	304	381	560	524	227	263
Luderick	84	127	125	86	47	42
Mackerel: School	107	144	58	29	15	24
Spanish	964	924	1,029	734	772	800
Mullet	1,466	1,358	1,557	1,315	1,380	1,514
Snapper	93	158	153	129	138	114
Tailor	178	202	183	247	176	233
Threadfin	153	221	301	292	178	165
Tuna	14	28	24	29	4	13
Whiting	380	406	354	317	318	297
Other and unidentified species	586	683	620	625	820	826
Total fish	5,313	5,425	5,697	5,085	4,762	4,864
Crabs	380	432	481	425	431	550
Lobsters	(b) 60	(b) 48	(b) 126	278	(b) 247	(b) 296
Prawns: Banana	3,747	7,153	2,380	3,658	2,285	5,388
King	816	997	1,193	1,262	1,482	603
Tiger	1,107	2,066	3,198	3,358	4,532	6,121
Other	976	1,486	1,657	1,766	2,280	2,336
Total crustaceans	7,086	12,183	9,035	10,747	11,258	15,294
Scallops	912	494	2,737	3,232	1,394	2,596
Squid	90	82	120	113	197	204
Other molluscs	—	—	1	2	2	—
Total molluscs (c)	1,002	576	2,858	3,346	1,593	2,800

(a) Live weight.

(b) Excluding rock lobsters.

(c) Excluding oysters. In 1978-79 the reported oyster catch was 288,000 bags, for which a weight conversion is not available.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Fisheries Statistics (7601.3) (*annual*)

Sawmill Statistics (8206.3) (*quarterly*)

Census of Mining Establishments: Details of Operations by Industry Sub-division (8401.3) (*annual*)

Mineral Production (8402.3) (*annual*)

Sand, Gravel, and Quarry Production (8403.3) (*half-yearly*)

Central Office Publications

Fisheries (7603.0) (*annual*)

Census of Mining Establishments: Details of Operations by Industry Class (8402.0) (*annual*)

Australian Mineral Industry (8403.0) (*quarterly*)

Mineral Production (8405.0) (*annual*)

Mineral Exploration (8407.0) (*annual*)

Other Publications

Annual reports of the Department of Mines, the Queensland Coal Board, the Department of Forestry, and the Queensland Fish Board.

Chapter 18

MANUFACTURING INDUSTRY

1 INTRODUCTION

The pattern of economic growth normal to a developing State involves a transition from a necessarily agricultural-based economy to one encompassing a constantly expanding manufacturing sector. Such development, and the accompanying diversification, is essential not only in creating the conditions for the increased wealth and welfare of the community, but also to ensure stability and provide broadening employment opportunities with continuing population growth.

Even though Queensland has experienced a constantly expanding manufacturing sector, only since 1969–70 has the value added in production by the manufacturing sector exceeded the value of production in the agricultural sector. In 1981–82, the gross value of agricultural commodities produced was \$2,613m compared to value added by manufacturing establishments of \$3,448m.

The statistics presented in this chapter describe the economic contribution made by those units engaged in secondary production. For an outline of the historical development of secondary production in Queensland see page 284 of the 1977 *Year Book*.

2 ASSISTANCE TO INDUSTRY

The State Government promotes its secondary industry developmental policies primarily through the Department of Commercial and Industrial Development. A major objective of the Department is to provide incentives for the establishment or expansion of industry within the State, generally, but particularly to those industries which would assist decentralisation. Industrial estates are developed in centres throughout the State and assistance is provided for the manufacturer to establish suitable premises on these estates. Costs incurred on pioneer factory buildings during 1982–83 was \$0.46m while expenditure on the acquisition and development of industrial estates during the year totalled \$6.00m.

In providing a service to industry the Department collects, collates, and disseminates information for decision-making, undertakes or assists in regional and resource development studies, investigates the technical and economic feasibility of production of given commodities, and encourages the introduction of new production techniques or pursues opportunities that are available to manufacture under licence.

As an extension of the advisory service to small businessmen the Department has appointed counsellors and in co-operation with the Department of Education has developed courses in small business management.

Further details of the Department's activities and those of other secondary industry promoting bodies are given on page 298 of the 1977 *Year Book*.

In addition to the assistance provided by the State Government, the Commonwealth Government also provides substantial assistance to secondary industry directly by way of subsidies, export incentives, etc., and indirectly by financial assistance channelled through State Governments and through the Australian Industry Development Corporation.

3 MANUFACTURING INDUSTRY STATISTICS

Integration of Censuses

Details of the operations of manufacturing establishments prior to the 1968–69 Census of Manufacturing were shown in the 1970 and earlier editions of the *Year Book* and a summary of statistics since 1860 is given in the Appendix.

The integration of the economic censuses (i.e. the censuses of Manufacturing, Mining, Wholesale Trade, Retail Trade and Selected Services, and Electricity and Gas Production and Distribution) in 1968–69 was made possible by the development of the 1969 version of the Australian Standard Industrial Classification (ASIC) which defined industries and units for collection of statistics. For details of the integration of economic censuses see Chapter 15 of the 1970 *Year Book*; page 288 of the 1974 *Year Book* explains the 1969 version of ASIC.

From the 1977–78 economic censuses, the 1978 edition of ASIC replaced the 1969 version which had been in use since the 1968–69 censuses. In general, the impact of the change in industrial classification is minimal at the ASIC 'division' (e.g. Manufacturing is Division C) and 'sub-division' (e.g. Textiles is a sub-division within Manufacturing) levels, leaving their basic character and structure unchanged. There is more impact, however, at more disaggregated levels of ASIC. Some differences between aggregates based on the 1969 and 1978 editions of ASIC are also due to changes in rules and procedures as defined for the 1978 edition.

'Value added' is considered the best measure of an establishment's or an industry's contribution to total production. It is calculated as turnover, less purchases and transfers in, plus increase (or less decrease) in stocks. This is a different concept from that used in the National Accounts where value added also excludes some administrative expenses and sundry charges, and the change in stocks component is measured by valuing the physical change in stocks at current prices.

Summary of Operations, 1981–82

The following table shows a summary of operations, i.e. number, wages and salaries, turnover, etc., for manufacturing establishments by industry sub-division for 1981–82. Employment and value added by industry sub-division are illustrated in the diagram on page 327. The data shown are for all manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed. From the 1975–76 census, only a limited range of data—employment and wages and salaries—was collected from single-establishment enterprises with fewer than four persons employed. These enterprises contribute only marginally to statistical aggregates other than number of establishments. An indication of the degree of significance of these smaller units can be obtained from the 1977 *Year Book* where the 1974–75 data were compiled in such a way that a link is provided to aid comparison between past and future series. For details of single-establishment enterprises employing fewer than four persons see pages 330 and 331.

In 1981–82 the number of manufacturing establishments, as defined above, was 3,556 compared with 3,291 in 1980–81. Activities entered into by these establishments accounted for a turnover of \$10,590m, an increase of 9.6 per cent over 1980–81 turnover, while value added in production increased by 12.1 per cent to reach \$3,448m. The manufacturing establishments contributing most to the overall growth in production during 1981–82 were the establishments predominantly engaged in producing commodities included in the food, beverages, and tobacco sub-division.

**MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY SUB-DIVISION,
QUEENSLAND, 1981-82**

Industry sub-division	Establishments (b)	Employment (c)			Wages and salaries (d)
		Males	Females	Persons	
	No.	No.	No.	No.	\$'000
Food, beverages, and tobacco	590	25,814	7,622	33,436	474,301
Textiles	43	661	544	1,205	14,740
Clothing and footwear	102	664	3,138	3,802	37,093
Wood, wood products, furniture	653	11,109	2,013	13,122	146,520
Paper, paper products, printing, etc. ..	266	7,244	2,892	10,136	142,792
Chemical, petroleum, coal products ..	65	2,845	472	3,317	59,566
Non-metallic mineral products	342	6,582	452	7,034	113,315
Basic metal products	59	6,279	372	6,651	119,106
Fabricated metal products	625	12,811	2,282	15,093	198,112
Transport equipment	221	12,194	652	12,846	179,038
Other machinery and equipment	340	9,843	1,446	11,289	158,543
Miscellaneous manufacturing	250	3,383	1,403	4,786	57,252
Total	3,556	99,429	23,288	122,717	1,700,379

SUMMARY FOR SIX YEARS

	No.	No.	No.	No.	\$'000
1976-77	3,001	90,975	21,782	112,757	981,583
1977-78	2,838	90,315	21,396	111,711	1,034,588
1978-79	2,886	91,200	21,759	112,959	1,125,060
1979-80	3,170	93,636	21,970	115,606	1,253,012
1980-81	3,291	94,319	21,796	116,115	1,410,213
1981-82	3,556	99,429	23,288	122,717	1,700,379

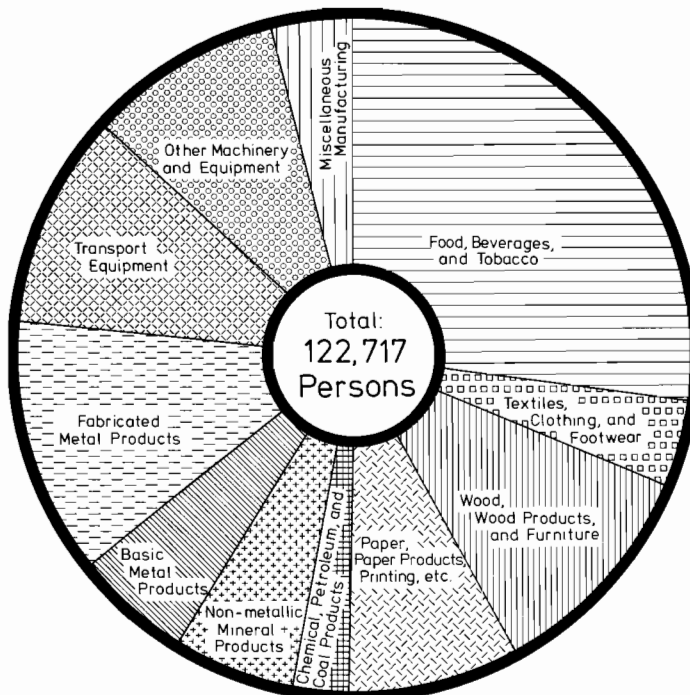
Industry sub-division	Turnover (e)	Increase in stocks	Purchases, transfers in, and selected expenses	Value added	Fixed capital expenditure (f)
	\$'000	\$'000	\$'000	\$'000	\$'000
Food, beverages, and tobacco	3,373,438	30,692	2,387,540	1,016,590	140,750
Textiles	77,218	-38	57,399	19,782	3,460
Clothing and footwear	102,031	431	46,173	56,291	831
Wood, wood products, furniture	585,666	8,255	336,320	257,602	9,193
Paper, paper products, printing, etc. ..	518,472	10,229	262,657	266,043	16,539
Chemical, petroleum, coal products ..	1,359,029	-7	1,154,434	204,589	28,519
Non-metallic mineral products	712,857	24,264	419,457	317,664	40,868
Basic metal products	1,080,982	31,391	865,483	246,890	337,312
Fabricated metal products	980,361	25,755	634,643	371,473	17,949
Transport equipment	897,396	16,788	603,615	310,570	4,421
Other machinery and equipment	612,597	27,838	372,863	267,571	16,473
Miscellaneous manufacturing	290,145	-1,589	175,451	113,105	10,495
Total	10,590,192	174,012	7,316,034	3,448,170	626,810

SUMMARY FOR SIX YEARS

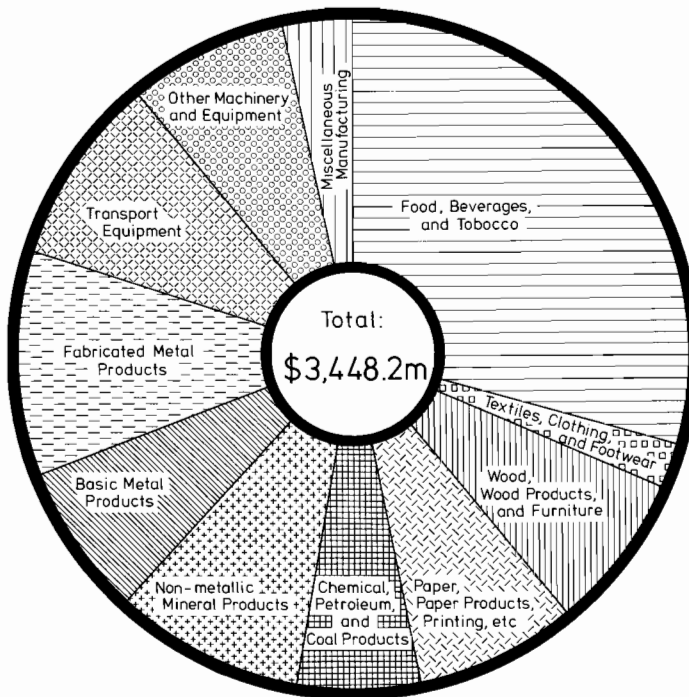
	\$'000	\$'000	\$'000	\$'000	\$'000
1976-77	5,261,290	111,848	3,381,704	1,991,434	223,287
1977-78	5,525,413	69,843	3,504,813	2,090,444	216,320
1978-79	6,590,922	119,055	4,387,550	2,322,426	223,465
1979-80	8,303,657	165,290	5,776,654	2,692,294	204,655
1980-81	9,666,541	129,907	6,721,580	3,074,868	414,185
1981-82	10,590,192	174,012	7,316,034	3,448,170	626,810

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed. (b) Number operating at 30 June. (c) Average number of persons employed during whole year, including working proprietors. (d) Excluding drawings of working proprietors. (e) Including transfers out and other operating revenue. (f) Outlay on fixed tangible assets less disposals.

MANUFACTURING ESTABLISHMENTS (a), QUEENSLAND, 1981-82



EMPLOYMENT BY INDUSTRY SUB-DIVISION



VALUE ADDED BY INDUSTRY SUB-DIVISION

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Food, Beverages, and Tobacco Industry Sub-division

The products of this sub-division provide not only major items of the day-to-day expenditure of most consumers but the establishments concerned with the production of these items employed 33,436 persons or 27.2 per cent of the labour force of manufacturing establishments in Queensland in 1981-82. The commodities and processes involved naturally lend themselves to decentralised production and this form of secondary production is predominant, in employment terms, for most Statistical Divisions of the State.

The industry group contributing most to production in 1981-82 was the other food products group which includes raw sugar. The production of this group contributed \$359.3m, or 10.4 per cent, to total value added for 1981-82. Next in order of importance was the meat products group with \$286.0m, or 8.3 per cent, of value added for all manufacturing establishments. The following table gives details of the Food, Beverages, and Tobacco Industry Sub-division by Industry Group.

**MANUFACTURING ESTABLISHMENTS (a)—FOOD, BEVERAGES, AND TOBACCO INDUSTRY SUB-DIVISION:
SUMMARY OF OPERATIONS BY INDUSTRY GROUP, QUEENSLAND, 1981-82**

Industry group	Establishments (b)	Employment (c)			Wages and salaries (d)
		Males	Females	Persons	
	No.	No.	No.	No.	\$'000
Meat products	97	9,437	2,858	12,295	165,982
Milk products	38	1,614	455	2,069	29,976
Fruit and vegetable products	23	965	678	1,643	21,979
Margarines and oils and fats, n.e.c. ..	4	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food products ..	18	611	216	827	11,586
Bread, cakes, and biscuits	252	2,443	1,926	4,369	45,536
Other food products	99	8,012	987	8,999	148,408
Beverages and malt	57	2,146	328	2,474	39,448
Tobacco products	2	n.p.	n.p.	n.p.	n.p.
Total	590	25,814	7,622	33,436	474,301

Industry group	Turnover (e)	Increase in stocks	Purchases, transfers in, and selected expenses	Value added	Fixed capital expenditure (f)
	\$'000	\$'000	\$'000	\$'000	\$'000
Meat products	1,079,357	5,165	798,494	286,028	7,433
Milk products	318,827	60	246,131	72,752	7,416
Fruit and vegetable products	123,020	1,084	86,927	37,176	1,567
Margarines and oils and fats, n.e.c. ..	n.p.	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food products ..	89,750	82	61,889	27,942	1,148
Bread, cakes, and biscuits	176,038	776	98,060	78,753	5,750
Other food products	1,175,884	4,366	820,925	359,326	79,037
Beverages and malt	316,513	2,596	192,218	126,891	38,347
Tobacco products	n.p.	n.p.	n.p.	n.p.	n.p.
Total	3,373,438	30,692	2,387,540	1,016,590	140,750

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed. (b) Number operating at 30 June. (c) Average number of persons employed during whole year, including working proprietors. (d) Excluding drawings of working proprietors. (e) Including transfers out and other operating revenue. (f) Outlay on fixed tangible assets less disposals.

Geographical Distribution

Details of manufacturing operations in Statistical Divisions and in Cities are shown in the following table.

MANUFACTURING ESTABLISHMENTS (a) IN STATISTICAL DIVISIONS AND CITIES, QUEENSLAND, 1981-82

Statistical Division or City	Establish- ments (b)	Persons employed (c)	Wages and salaries (d)	Turnover (e)	Purchases etc. (f)	Value added	Fixed capital expenditure (g)
	No.	No.	\$'000	\$'000	\$'000	\$'000	\$'000
Brisbane	1,912	75,140	1,023,752	6,398,467	4,405,873	2,092,969	173,254
Brisbane	1,476	61,161	845,199	5,507,641	3,837,250	1,741,210	149,041
Ipswich	78	6,796	91,562	337,030	193,643	165,174	10,733
Logan	142	2,083	21,964	130,743	84,877	47,898	1,838
Redcliffe	29	408	4,031	17,144	11,110	6,559	450
Moreton	437	7,971	100,432	559,563	369,972	200,024	14,418
Gold Coast	208	3,465	42,695	206,625	122,316	88,812	5,332
Wide Bay-Burnett ..	226	6,869	93,058	493,126	309,553	197,788	20,955
Bundaberg	67	2,360	31,770	130,498	74,529	65,332	4,585
Gympie	24	709	7,646	57,926	40,287	17,916	991
Maryborough	42	1,739	24,277	100,205	63,152	40,181	2,205
Darling Downs	244	6,308	79,429	429,111	289,824	144,398	6,715
Toowoomba	109	3,965	51,705	251,338	158,502	91,053	4,023
Warwick	22	426	4,837	38,434	28,776	10,118	120
South-West	27	240	2,390	17,789	13,220	4,085	230
Fitzroy	185	6,595	100,554	598,270	408,238	212,020	305,089
Gladstone	43	2,048	39,766	284,470	189,089	105,096	59,939
Rockhampton	73	2,813	37,668	162,375	101,876	63,762	-1,178
Central-West	9	49	358	1,502	849	668	40
Mackay	115	4,042	63,795	479,176	332,581	151,523	40,948
Mackay	52	985	13,906	80,753	49,956	34,127	2,141
Northern	198	8,761	132,486	787,903	520,091	278,683	42,823
Charters Towers ..	11	83	851	3,876	1,846	2,063	120
Townsville	113	4,442	62,816	300,433	179,290	121,525	11,683
Far North	173	5,465	80,871	411,277	267,005	151,308	18,430
Cairns	78	1,939	26,661	113,191	66,261	52,151	3,056
North-West	30	1,277	23,254	414,008	398,827	14,705	3,908
Mount Isa	22	1,223	22,837	409,660	397,010	13,748	3,803
Total Queensland	3,556	122,717	1,700,379	10,590,192	7,316,034	3,448,170	626,810

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed. (b) Number operating at 30 June. (c) Average number of persons employed during whole year, including working proprietors. (d) Excluding drawings of working proprietors. (e) Including transfers out and other operating revenue. (f) Including transfers in and selected expenses. (g) Outlay on fixed tangible assets less disposals.

The relative importance of the various types of establishments throughout Queensland, and the proportion of each type in the Brisbane Statistical Division, are illustrated on page 331.

Capital Expenditure

The net amount expended on new and second-hand fixed tangible assets by the manufacturing sector during 1981-82 was \$627m. This was an increase of 51.4 per cent when compared with that of the preceding year. Of this investment, \$337m was incurred by the industry sub-division producing basic metal products, the major part of the expenditure being undertaken by the basic non-ferrous metals establishments.

Foreign Ownership and Control

The most recent figures relating to foreign ownership and control in manufacturing industries are for the year 1975-76. Details are published in the ABS publication *Foreign Control in Manufacturing Industry, Study of Large Enterprise Groups, 1975-76* (Catalogue No. 5315.0).

Size of Establishment

The following table provides data classified by industry sub-division and employment size group for all manufacturing establishments. The statistics relate only to those establishments that were operating at 30 June 1982.

For employment size purposes, a manufacturing establishment is classified according to the average number of persons (including working proprietors) employed in the establishment during its period of operation (whether the whole, or only part of the year) excluding any persons employed at any separately located administrative office or ancillary unit serving that establishment.

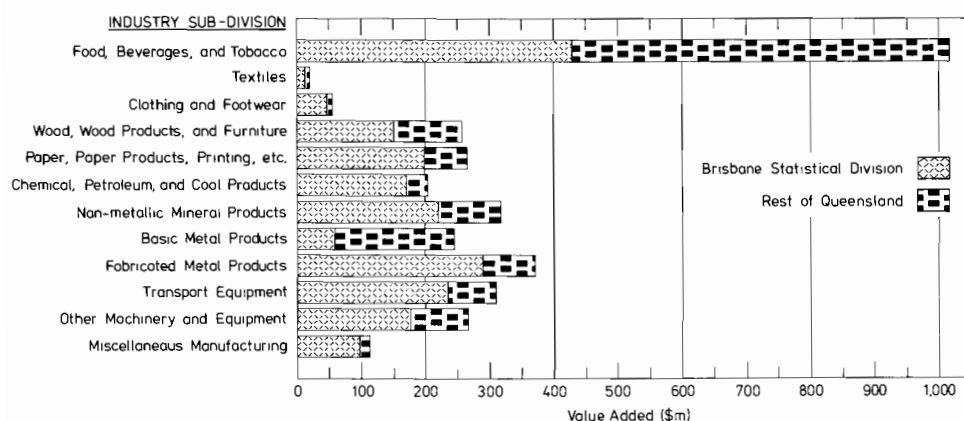
MANUFACTURING ESTABLISHMENTS: NUMBER OF ESTABLISHMENTS AND EMPLOYMENT BY EMPLOYMENT SIZE GROUP AND INDUSTRY SUB-DIVISION, QUEENSLAND, AT 30 JUNE 1982

Industry sub-division	Establishments with fewer than 4 persons (a)	Establishments employing (b)					Total
		Fewer than 10 persons	10 to 19 persons	20 to 49 persons	50 to 99 persons	100 or more persons	
NUMBER OF ESTABLISHMENTS							
Food, beverages, and tobacco	145	266	108	79	38	99	590
Textiles	34	17	12	11	1	2	43
Clothing and footwear	41	31	20	29	15	7	102
Wood, wood products, and furniture ..	568	342	154	103	33	21	653
Paper, paper products, printing, and publishing	116	114	73	39	20	20	266
Chemical, petroleum, and coal products	20	27	14	9	4	11	65
Non-metallic mineral products ..	78	235	44	34	14	15	342
Basic metal products	16	19	10	7	11	12	59
Fabricated metal products	357	286	150	123	42	24	625
Transport equipment	121	110	46	25	14	26	221
Other machinery and equipment ..	126	129	97	64	29	21	340
Miscellaneous manufacturing	238	135	50	41	18	6	250
Total manufacturing	1,860	1,711	778	564	239	264	3,556
EMPLOYMENT							
Food, beverages, and tobacco	360	1,610	1,455	2,418	2,530	26,182	34,195
Textiles	76	101	200	307	n.p.	n.p.	1,061
Clothing and footwear	82	222	274	839	1,066	1,243	3,644
Wood, wood products, and furniture ..	1,224	2,039	1,985	3,053	2,243	3,180	12,500
Paper, paper products, printing, and publishing	268	696	1,035	1,128	1,368	5,804	10,031
Chemical, petroleum, and coal products	39	173	177	312	265	2,252	3,179
Non-metallic mineral products ..	177	861	596	1,013	1,036	3,287	6,793
Basic metal products	32	124	139	217	734	5,646	6,860
Fabricated metal products	798	1,772	2,035	3,810	2,883	4,643	15,143
Transport equipment	267	699	631	775	944	10,093	13,142
Other machinery and equipment ..	277	780	1,287	1,975	2,104	5,382	11,528
Miscellaneous manufacturing	499	778	704	1,245	n.p.	n.p.	4,691
Total manufacturing	4,099	9,855	10,518	17,092	16,424	68,878	122,767

(a) Single-establishment manufacturing enterprises with fewer than four persons employed.

(b) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

MANUFACTURING ESTABLISHMENTS, QUEENSLAND, 1981-82

**Single-establishment Manufacturing Enterprises with Fewer than Four Persons Employed**

The next table shows for each Statistical Division the limited range of data that is available for single-establishment manufacturing enterprises with fewer than four persons employed.

SINGLE-ESTABLISHMENT MANUFACTURING ENTERPRISES WITH FEWER THAN FOUR PERSONS EMPLOYED, QUEENSLAND, 1981-82

Statistical Division	Establishments	Employment, including working proprietors, at 30 June			Wages and salaries (a)
		Males	Females	Persons	
	No.	No.	No.	No.	\$'000
Brisbane	845	1,373	503	1,876	9,342
Moreton	339	579	181	760	3,701
Wide Bay-Burnett	123	204	69	273	1,202
Darling Downs	140	227	77	304	1,081
South-West	18	32	4	36	158
Fitzroy	86	138	36	174	653
Central-West	10	17	6	23	129
Mackay	66	118	29	147	589
Northern	84	147	41	188	809
Far North	131	205	76	281	1,141
North-West	18	27	10	37	183
Total Queensland	1,860	3,067	1,032	4,099	18,989

(a) Excluding drawings of working proprietors.

4 PRINCIPAL MANUFACTURING COMMODITIES

Quantities of the principal commodities made by manufacturing establishments are shown in the next table.

Details relate only to commodities produced by manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

QUANTITIES OF SELECTED MANUFACTURING COMMODITIES, QUEENSLAND

Commodity	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83 p
Aerated waters '000 litres	153,317	165,455	166,171	190,193	183,973	185,924
Bacon and ham tonnes	21,199	18,569	24,668	23,804	22,264	22,292
Beans, green, quick frozen .. '000 kg	6,980	9,397	n.p.	n.p.	n.p.	n.p.
Bedding and mattresses						
Bed bases No.	107,912	116,654	98,855	102,170	100,992	76,911
Mattresses: Innerspring .. No.	69,975	76,126	82,429	83,636	87,776	91,068
Other than inner-spring .. No.	170,128	164,553	167,535	166,958	189,148	n.y.a.
Bran and pollard tonnes	46,829	51,826	50,300	52,027	43,562	42,508
Bread '000 kg	119,057	130,307	119,934	116,356	121,721	n.y.a.
Bricks, clay '000	262,152	268,184	302,203	341,836	376,005	244,643
Butter (a) (b) '000 kg	4,837	r 5,664	r 3,515	r 2,795	3,209	3,881
Cheese (a) (b) '000 kg	10,106	12,562	11,328	10,766	13,623	12,599
Concrete blocks (c) '000	26,853	25,518	29,918	35,076	40,267	31,427
Concrete, ready-mixed .. '000 cu m	1,909	2,072	2,366	2,849	3,586	2,886
Cordials and syrups						
Fruit juice '000 litres	15,175	n.p.	13,400	r 15,002	15,071	16,677
Other '000 litres	4,757	5,118	5,851	r 7,102	7,076	7,270
Detergents tonnes	11,153	16,977	20,078	23,878	27,170	24,775
Flour, wheaten tonnes	136,339	146,194	142,725	146,658	144,523	147,422
Footwear—Boots, shoes, sandals, and slippers (d) .. '000 pairs	909	973	965	924	646	653
Meat, canned (e) tonnes	12,106	11,428	9,890	9,433	6,878	n.y.a.
Milk, powdered '000 kg	9,178	9,728	n.p.	n.p.	n.p.	n.p.
Paints and enamels '000 litres	17,551	18,743	19,980	19,553	23,335	17,838
Plywood (1 mm basis) .. '000 sq m	n.p.	27,773	30,510	25,344	25,392	n.y.a.
Soap and soap-based products .. tonnes	2,810	3,241	n.p.	n.p.	n.p.	n.p.
Steel wire nails tonnes	3,991	n.p.	n.p.	n.p.	n.p.	n.p.
Stock and poultry foods						
Poultry pellets and crumbles .. tonnes	103,252	119,891	153,922	r 148,451	145,851	158,903
Poultry mash tonnes	72,999	66,106	53,242	r 42,992	46,939	41,532
Other prepared foods tonnes	99,338	119,307	140,037	r 143,685	139,418	179,499
Sugar, raw tonnes	r 3,209,255	2,748,858	2,807,477	3,148,955	3,250,331	3,325,157
Timber, sawn (f)						
Hardwoods cu m	249,378	250,037	235,715	246,103	285,697	n.y.a.
Softwoods: Natural cu m	97,208	115,642	116,669	110,772	108,160	n.y.a.
Plantation cu m	59,882	72,389	87,312	78,455	81,128	n.y.a.
Sleepers cu m	11,399	14,905	20,540	9,278	11,428	n.y.a.
Veneers '000 sq m	31,727	30,213	30,719	39,228	35,029	n.y.a.
Water heating systems No.	29,075	32,883	31,603	41,631	56,208	n.p.
Wheatmeal, edible tonnes	9,427	10,314	10,669	12,501	11,802	10,737

(a) Excluding farm production. (b) Source: Australian Dairy Corporation. (c) Expressed in terms of 400 mm x 200 mm x 200 mm. (d) Excluding thongs and boots with uppers of rubber or synthetic material. (e) Including bacon, ham, and meat and vegetables: excluding rabbit, poultry, and baby foods. (f) Australian grown only, and excluding timber sawn and used in plywood and case mills.

5 ELECTRICITY AND GAS

Traditionally, the main sources of energy in providing heat, light, and power have been reticulated town gas and electricity. In recent times, natural gas, oil, and liquefied petroleum gas have caused major changes in the supply of and demand for power to the marked detriment of coal-generated gas production. Coal still predominates as the basic energy source.

Integrated Economic Censuses

Within the framework adopted for the integrated economic censuses, the electricity and gas industries, which were previously included in the annual Manufacturing Census, were the subject of separate and less frequent censuses from 1968-69. Since 1979-80 statistics for these industries have been collected on an annual basis.

Details of the operation of electricity and gas establishments are shown in the following table.

ELECTRICITY AND GAS ESTABLISHMENTS (a): SUMMARY OF OPERATIONS, QUEENSLAND

Year	Estab- lishments operating	Persons employed	Wages and salaries	Turnover (b)	Stocks at 30 June		Purchases, transfers in, etc. (c)	Value added
					Opening	Closing		
	No.	No.	\$m	\$m	\$m	\$m	\$m	\$m
Electricity								
1971-72	21	8,875	44.6	194.3	12.9	14.1	79.1	116.4
1974-75	20	9,009	78.2	318.8	14.6	16.7	137.2	183.7
1977-78	11	9,913	116.0	622.3	30.1	35.7	355.4	272.5
1979-80	10	10,980	149.2	870.0	43.7	46.1	498.7	373.7
1980-81	11	11,768	178.1	1,018.2	48.7	63.9	558.2	475.3
1981-82	11	12,576	216.2	1,178.6	63.8	75.7	622.3	568.2
Gas								
1971-72	7	669	2.6	11.6	0.6	0.6	5.1	6.6
1974-75	8	540	3.7	17.0	0.7	0.8	7.1	10.0
1977-78	7	704	6.8	30.4	1.7	1.9	13.2	17.4
1979-80	7	694	7.9	42.1	2.4	3.8	21.2	22.3
1980-81	7	714	9.1	53.0	3.9	5.6	26.4	28.3
1981-82	7	721	10.2	63.5	7.1	6.8	33.5	29.7

(a) Covers production and distribution. (b) Including other operating revenue. Electricity is produced by certain undertakings and sold to other undertakings for distribution. In these cases sales of electricity are duplicated due to the inclusion of the bulk sales to these distributors. (c) Including selected expenses.

The historical development of the electricity and gas industries is given on page 299 of the 1977 Year Book.

Electricity Industry

Organisation

Queensland's electricity supply industry is regulated by the *Electricity Act* 1976-1982. This Act deals with the organisation and regulation of generation, transmission, distribution, supply, and use of electricity in Queensland and to matters of safety relating to these functions.

Before the decision in April 1982 to amalgamate the Queensland Electricity Generating Board and the State Electricity Commission of Queensland, the main functions of the Commission were to plan and ensure the proper development and co-ordination of the electricity supply industry throughout the State, to enforce safety regulations, to control electricity charges, to raise capital for development, and to administer the Act. The functions of generation and main transmission were carried out by the Queensland Electricity Generating Board.

From 1 July 1982, the Commission was appointed to perform the functions and duties of the Board and to operate the State's major power stations and supply energy in bulk to the seven distributing boards via the Statewide transmission network.

The distributing boards, which supply retail consumers in their respective areas, are the South East Queensland Electricity Board, South West Queensland Electricity Board, Wide Bay-Burnett Electricity Board, Capricornia Electricity Board, Mackay Electricity Board, North Queensland Electricity Board, and the Far North Queensland Electricity Board. Four of these distributing boards (the South West Queensland, Capricornia, North Queensland, and Far North Queensland Electricity Boards) also operate small internal combustion stations in their respective areas.

Generation and Distribution

Over 90 per cent of the State's generation is derived from steam power stations fuelled by black coal. Hydro-electric stations located in North Queensland provide around 5 per cent, depending on rainfall in the catchment areas, with the balance being generated by gas turbine

and diesel power stations using light fuel oil. The Roma diesel power station also uses locally-produced natural gas.

Electricity generated by public electricity undertakings in Queensland during 1982-83 totalled 14,736m kWh. In addition, 171m kWh units were purchased in bulk from other producers of electricity for redistribution to consumers.

Details of the capacity, in megawatts (MW), of generating plant installed in public electricity undertakings in Queensland are given in the next table.

INSTALLED GENERATING PLANT: PUBLIC ELECTRICITY UNDERTAKINGS, QUEENSLAND
(Source: State Electricity Commission)
(MW)

Type of plant	At 30 June					
	1978	1979	1980	1981	1982	1983
Steam	2,511	2,734	2,696	2,971	3,246	3,246
Hydro	132	132	132	132	132	132
Internal combustion	51	48	49	48	50	58
Gas turbine	163	163	163	163	163	178
Total	2,857	3,077	3,040	3,314	3,591	3,614

The southern-central network is served by the following steam power stations: Swanbank 'A' (396 MW), Swanbank 'B' (480 MW), Tennyson (240 MW), Bulimba (180 MW), Callide (120 MW), and Gladstone (1,650 MW). Gas turbine stations at Middle Ridge (60 MW), Swanbank 'C' (30 MW), Rockhampton (25 MW), Tarong (15 MW), and Gladstone (14 MW) also serve the southern-central network.

The northern electricity network is supplied by a steam power station at Collinsville (180 MW), hydro-electric stations at Kareeya (72 MW) and Barron Gorge (60 MW), and a gas turbine station at Mackay (34 MW).

Until the reorganisation of the electricity supply industry in 1977, supply was provided in the area west of the larger regional authorities, by undertakings operated by Local Authorities and over the years there had been a trend for transmission from larger centres to replace less economic generation at small centres. From 30 June 1977 direct involvement by Local Authorities in electricity undertakings ceased and the responsibility for supply to final consumers and the control of power stations outside the main grid were vested in the newly constituted Electricity Boards.

The electrical transmission and distribution systems within the State comprised 133,690 circuit kilometres of electric lines at 30 June 1983, which represented an increase of 8,098 kilometres over the figure at 30 June 1982. The main transmission voltages are 275 kV, 132 kV, 110 kV, and 66 kV, and in certain areas, 33 kV and 22 kV. The single wire earth return system is used extensively in rural electrification and 38,128 kilometres of line for this system of distribution was in service at 30 June 1983.

The approximate number of electricity consumers at 30 June 1983 was 909,000, an increase of 35,500 on the number at 30 June 1982.

Future Development

There are four major generation projects being developed or under construction in Queensland which, when completed, will provide a sound basis for ensuring adequate electricity supply for the State into the next decade.

The Wivenhoe Pumped Storage Hydro Electric Project, when completed in 1984, will consist of two 250 MW pump turbine generating units, 107 route kilometres of 275 kV

transmission lines, and will require the construction of a substation with a total transformer capacity of 624 megavolt-ampere (MVA).

The Tarong Power Station will consist of four 350 MW generating units. The first set is expected to be commissioned in May 1984 and the other three sets in May 1985, February 1986, and November 1986. Included with the project is a 15 MW gas turbine generating unit which was commissioned in March 1983 and is now available to supply power to the system. To connect the power station to the main transmission network, it will require the construction of 331 route kilometres of 275 kV transmission lines and three substations with a transformer capacity of 2,000 MVA.

The Callide 'B' Power Station which is expected to be completed by 1989, will consist of two 350 MW generating units. It will involve the construction of 290 route kilometres of transmission lines and the installation of transformers with a capacity of 800 MVA.

The fourth power station is to be situated at Stanwell (24 kilometres south-west of Rockhampton) and is expected to be operational by 1989. It will consist of four 350 MW generating units and will involve the construction of almost 400 kilometres of 275 kV transmission lines.

Finances of Public Electricity Undertakings

During 1982-83 revenue received by the electricity industry totalled \$874.6m. This represented an average price per unit sold of 6.54c and an average annual billing per consumer of \$899. Production cost was \$846.3m, an increase of 27.6 per cent over that for 1981-82.

The following table gives particulars of capital expenditure for public electricity undertakings for the last six years.

CAPITAL EXPENDITURE: PUBLIC ELECTRICITY UNDERTAKINGS, QUEENSLAND
(Source: State Electricity Commission)
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Generation	60,764	98,641	103,791	118,975	185,323	510,836
Transmission	31,677	22,771	45,627	51,733	57,514	57,266
Distribution	46,882	57,171	71,636	93,263	115,524	141,062
Other	27,015	23,848	24,244	40,279	46,230	86,824
Total	166,337	202,431	245,298	304,250	404,591	795,988

The principal source of funds to finance capital expenditure for electricity works in Queensland is debenture loans. In 1982-83, \$601.4m was provided from this source. Total funds available to finance capital works during 1982-83 amounted to \$825.7m.

Electrical Accidents

Electrical accidents in industry or elsewhere must be notified to the Commissioner for Electricity Supply. Those reported during the last three years are shown in the next table.

ELECTRICAL ACCIDENTS, QUEENSLAND
(Source: State Electricity Commission)

Particulars	1980-81			1981-82			1982-83		
	Employees (a)	Others	Persons	Employees (a)	Others	Persons	Employees (a)	Others	Persons
Fatal	2	11	13	2	28	30	3	13	16
Non-fatal	53	297	350	40	279	319	58	381	439
Total	55	308	363	42	307	349	61	394	455

(a) Within the electrical industry.

Gas Industry

In 1982–83 reticulated gas was available in Brisbane, Ipswich, Toowoomba, Dalby, Bundaberg, Rockhampton, Mackay, and Cairns. In addition bulk sales of liquefied petroleum gas for other than reticulation purposes were made in most parts of the State.

The gas industry in Queensland has undergone marked changes in recent years. The basic cause of this change has been the advent of natural gas, piped from the Roma field since 1969, resulting in a very large growth in the industrial and commercial market to the extent that it now exceeds the domestic market for gas. Since the conversion to natural gas in 1970, natural gas is available in reticulated form in Ipswich, Dalby, Toowoomba, and the south side of Brisbane.

In March 1982 natural gas was made available to several industrial consumers on the north side of Brisbane with the tie-in of a natural gas transmission line across the Brisbane River at Gibson Island to the main line. Domestic consumers on the north side are still receiving reformed town gas but will ultimately receive natural gas.

During 1982–83 natural gas sales in franchise areas totalled 4,601 terajoules, an increase of 12.4 per cent over those for 1981–82. Sales of reformed town gas decreased by 0.1 per cent from 1,028 terajoules in 1981–82 to 1,027 terajoules in 1982–83.

Consumption of liquefied petroleum gas increased from 70,229 tonnes in 1981–82 to 75,918 tonnes in 1982–83, an increase of 8.1 per cent. The automotive liquefied petroleum gas market increased by 23.3 per cent from 14,120 tonnes in 1981–82 to 17,411 tonnes in 1982–83.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Census of Manufacturing Establishments: Summary of Operations by Industry Class (8202.3) (*annual*)

Census of Manufacturing Establishments: Details of Operations by Industry (8203.3) (*annual*)

Census of Manufacturing Establishments: Selected Items of Data Classified by Employment Size Group and Industry Group (8204.3) (*annual*)

Census of Manufacturing Establishments: Small Area Statistics by Industry (8205.3) (*annual*)

Manufacturing Commodities: Principal Articles Produced (8301.3) (*annual*)

Central Office Publications

Manufacturing Establishments: Details of Operations by Industry Class (8203.0) (*annual*)

Manufacturing Establishments: Selected Items of Data Classified by Industry and Employment Size (8204.0) (*annual*)

Electricity and Gas Establishments: Details of Operations by States, Territories and Australia (8208.0) (*annual*)

Manufacturing Commodities: Principal Articles Produced (8303.0) (*annual*)

Production Bulletins Nos 1–8 (8357.0 to 8364.0) (*monthly*)

Other Publications

Annual reports of the Department of Commercial and Industrial Development, the State Electricity Commission of Queensland, and the Government Gas Engineer and Chief Gas Examiner.

Chapter 19

EXTERNAL TRADE

1 INTRODUCTION

The 1901 *Year Book* reported that 'Queensland is essentially a country of exports' and that 'gold, products of the pastoral industry and sugar, are the chief items of exports; these three products or group of products comprise between them 91 per cent of all exports'. External trade is still of great importance to Queensland, as the comparatively small population provides only a limited market for local production.

The power to legislate with respect to trade and commerce with other countries and among the States is conferred on the Commonwealth Parliament by the Constitution. The Constitution also states that the collection and control of duties of customs and excise and control of payment of bounties rests with the Commonwealth Government and that trade, commerce, and intercourse among the States is to be absolutely free.

Details of the customs tariffs, trade agreements, import and export controls, etc., are found in *Year Book Australia* No. 67, 1983, pages 661 to 669.

External trade statistics are classified in accordance with the Australian Import and Export Commodity Classifications. Since 1 July 1978, these classifications are based on the United Nations Standard International Trade Classification (Second Revision), which in turn is closely related to the Customs Co-operation Council Nomenclature (formerly known as the Brussels Tariff Nomenclature) used in the Australian Customs Tariff.

Statistics of overseas trade are compiled from documents obtained under the Customs Act and supplied to the Australian Bureau of Statistics by the Bureau of Customs, Department of Industry and Commerce.

Goods sold to overseas buyers before export are valued at the free on board (f.o.b.) Australian port of shipment equivalent of the actual price paid to the exporter. Goods shipped on consignment are valued at the f.o.b. Australian port of shipment equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale. The recorded value of exports includes the value of outside packages, other than international containers used for containerised cargo.

The recorded value of imports is the value for duty for Customs purposes. On 1 July 1976, Australia adopted the internationally recognised Brussels Definition of Value (BDV) on a free on board (f.o.b.) basis (i.e. charges and expenses involved in delivering the goods from the place of exportation to the place of introduction in Australia, are excluded). The value for duty is based on the normal price, i.e. the price the goods would fetch at the time when duty becomes payable on a sale in the open market between a buyer and a seller independent of each other. In practice, the basis for valuation is generally taken to be the invoice price subject to certain safeguards and adjustments where necessary. The recorded value of imports includes the value of outside packages, other than international containers used for containerised cargo. Because of the change in the basis of valuation the recorded imports figures from 1976-77 are not comparable with those for previous years.

From July 1978 a change was made in the system of recording the State from which exports took place. From that date exports are recorded on a 'State of origin' basis instead of 'State of final shipment'. Overseas imports continue to be recorded on a 'State of lodgement of import documents' and therefore do not provide a record of State of final consumption. Goods imported directly into Queensland may pass to other States and more importantly goods recorded as imported by other States pass into Queensland.

Interstate trade statistics are compiled by the Queensland Office of the Australian Bureau of Statistics from information supplied by importers and exporters. The statistics compiled, however, are believed to be deficient because of the problem of ensuring complete coverage.

Most of Queensland's external trade is by sea, conducted through a system of ports extending from Weipa and Thursday Island in the north to Brisbane in the south. Brisbane is the main port for overseas imports into Queensland while other ports serve primarily as specific outlets for sugar and other agricultural produce, for the pastoral industry, and for minerals such as bauxite, including the derivative alumina, and coal.

In addition there is significant trade by road and rail with the southern States and some interstate trade by air transport such as the export of fruit and vegetables.

2 TOTAL EXTERNAL TRADE

The next table shows a summary of the total recorded external trade of Queensland for the last six years.

EXTERNAL TRADE, QUEENSLAND
(\$m)

Direction of trade				1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Exports									
Overseas (a)	..	..	..	2,821.4	3,300.1	4,261.7	4,501.3	4,414.5	(b) 4,470.9
Interstate (c)	..	..	..	1,114.1	1,412.2	1,596.7	1,705.5	1,889.0	1,863.3
Imports									
Overseas	..	..	..	887.2	1,028.0	1,321.1	1,882.8	2,179.8	1,994.6
Interstate (c)	..	..	..	2,386.4	2,866.0	3,272.3	3,813.5	4,503.0	4,439.1

(a) From July 1978 recorded on a State of origin basis, not on a State of final shipment basis as previously.
valued at \$20.0m.

(c) Refer to Section 1 regarding coverage.

(b) Including ships' stores

3 EXPORTS

Overseas

Queensland's overseas exports in 1982-83 were worth \$4,470.9m, an increase of \$56.4m on the figure recorded in 1981-82. Minerals (including coal) continued to be the State's most valuable overseas exports. The value of coal exports was \$1,563.7m (\$324.5m higher than in 1981-82), of which \$1,093.2m, or 69.9 per cent, went to Japan. Copper and lead exports totalled \$338.2m, which was \$112.8m more than in the previous year, the principal market being the United Kingdom which took \$224.7m.

Sugar exports in 1982-83 were valued at \$554.7m, or 12.4 per cent of the State's total exports, compared with \$758.0m in 1981-82, while the value of meat exported was \$621.9m, which was 12.4 per cent more than the figure for the previous year.

The value of Queensland's overseas exports to Japan in 1982-83 was \$1,762.7m, which was 39.4 per cent of the State total. The United States accounted for a further 11.1 per cent (\$494.9m) and Canada for 3.7 per cent (\$165.7m). The corresponding percentages going to these three countries in 1981-82 were 35.4, 15.6, and 4.6, respectively. The European Economic Community (Common Market), excluding the United Kingdom, took 9.0 per cent of Queensland's overseas exports in 1982-83.

Interstate

Interstate exports are mainly divided into three major groups. As a group, food and live animals was the major export earner in 1982-83 with \$664.4m (35.7 per cent), followed by machinery and transport equipment with \$368.3m (19.8 per cent) and manufactured goods classified chiefly by material with \$340.1m (18.3 per cent).

Principal Items and Destinations of Exports

The following table shows the principal items of exports from Queensland to overseas countries and to other States of Australia for 1982-83.

OVERSEAS AND INTERSTATE EXPORTS, PRINCIPAL ITEMS, QUEENSLAND, 1982-83
(\$'000)

Commodity	To overseas	To other States (a)
<i>Food and live animals</i>	<i>1,493,765</i>	<i>664,360</i>
Animals, live	14,605	69,361
Beef and veal: fresh, chilled, or frozen	567,278	24,406
Lamb, mutton, and goat meat: fresh, chilled, or frozen	8,071	n.p.
Other meat, poultry, etc.: fresh, chilled, or frozen	23,993	5,446
Other meat and meat preparations: prepared or preserved	22,508	35,278
Milk and cream: fresh, evaporated, condensed, or dried	9,841	n.p.
Butter, including ghee	5,324	16,048
Cheese	685	
Eggs and egg yolks, liquid or dried	1,279	n.p.
Fish, crustaceans, and molluscs, fresh or prepared	84,400	6,308
Wheat, unmilled	98,534	
Barley, unmilled	2,776	1,032
Millet and panicum, unmilled	4,018	990
Sorghum, unmilled	50,901	524
Meal and flour of wheat and of other cereal grains	760	10,312
Cereal preparations and preparations of flour and starch of fruits and vegetables	3,750	24,206
Fruit and nuts, fresh or dried	4,431	33,408
Fruit and nuts, preserved, and fruit preparations	7,333	52,973
Vegetables, fresh or prepared	4,216	51,141
Sugar, raw or refined	554,668	n.p.
Molasses	4,856	n.p.
Coffee, cocoa, tea, spices, chocolate, and chocolate confectionery	164	3,949
Feeding stuff for animals, except unmilled cereals	11,562	12,618
Margarine, lard, and other rendered pig and poultry fat	703	n.p.
Food preparations, n.e.s.	7,107	54,369
<i>Beverages and tobacco</i>	<i>(b) 5,973</i>	<i>60,709</i>
Non-alcoholic beverages, excluding fruit juices etc.	1,579	
Alcoholic beverages	361	26,865
Tobacco, unmanufactured, and tobacco refuse	3,753	
Tobacco manufactures	280	33,843
<i>Crude materials, inedible, except fuels</i>	<i>(b) 799,074</i>	<i>161,920</i>
Bovine and equine hides and calf skins, undressed	35,217	400
Sheep and lamb skins, undressed	1,035	
Other hides and skins and fur skins, undressed	(b) 2,684	302
Peanuts	5,471	
Other oil seeds and nuts, and flour and meal thereof	529	5,384
Timber in the rough, or sawn, dressed, etc.	(b) 159	
Wool fibres and other animal hair	105,270	2,578
Zinc ore and concentrates		
Tin ore and concentrates	(b) 597,501	147,026
Other metals, ores, and concentrates, including mineral sands		
Crude animal and vegetable materials, n.e.s.	(b) 51,208	6,230
<i>Mineral fuels, lubricants, and related materials</i>	<i>(b) 1,589,445</i>	<i>100,154</i>
Coal, coke, and briquettes	1,563,687	
Petroleum, petroleum products, and petroleum gases	(b) 25,758	100,154

OVERSEAS AND INTERSTATE EXPORTS, PRINCIPAL ITEMS, QUEENSLAND, 1982-83—continued
(\$'000)

Commodity	To overseas	To other States (a)	
<i>Animal and vegetable oils and fats</i>	26,267	4,640	
Tallow, edible	705	}	4,640
Tallow, inedible	24,627		
Other animal and vegetable oils and fats	935		
<i>Chemicals</i>	(b) 10,218	70,096	
<i>Goods classified chiefly by material</i>	(b) 362,401	340,066	
Leather and manufactures thereof and fur skins (not apparel or travel or sporting goods)	(b) 1,813	12,040	
Materials of rubber and articles of rubber	1,317	13,885	
Plywood and veneers	544	8,428	
Other wood and cork manufactures, excluding furniture	(b) 273	}	44,107
Paper and paperboard	1,048		
Articles made of paper pulp, paper, or paperboard	715		
Textile yarn and thread and textile fabrics	(b) 380	11,235	
Made-up articles of textile material (not clothing) and floor coverings	160	4,702	
Non-metallic mineral manufactures, n.e.s.	(b) 9,541	7,967	
Iron and steel	1,178	18,131	
Copper and copper-base alloys	144,541	n.p.	
Lead and lead-base alloys	193,671	n.p.	
Fabricated structural parts and structures, n.e.s., of iron and steel, aluminium, or zinc	2,913	12,676	
Metal containers for storage and transport	686	}	23,036
Household equipment of base metals (non-electric)	83		
Wire products: nails, screws, bolts, etc. : tools	835	4,034	
Manufactures of metal, n.e.s.	(b) 2,701	35,924	
<i>Machinery and transport equipment</i>	(b) 69,745	368,263	
Agricultural and horticultural machinery	(b) 13,525	42,935	
Other non-electric machines, appliances, and parts	(b) 32,214	21,339	
Electric power machinery and switchgear	3,065	19,697	
Domestic electrical equipment	(b) 240	1,913	
Other electrical machinery and apparatus	861	5,053	
Railway and tramway vehicles	382	}	274,341
Road motor vehicles and parts	7,141		
Road vehicles other than motor vehicles: aircraft, ships, boats, and floating structures	12,318		
<i>Miscellaneous manufactured articles</i>	(b) 11,118	93,123	
Sanitary, plumbing, heating, and lighting fixtures	179	21,460	
Furniture	444	9,846	
Clothing and accessories (not plastic) and articles of knitted or crocheted fabric	630	34,198	
Footwear, gaiters, and similar articles	251	2,311	
Printed matter	1,060	9,581	
Articles made of plastic materials, artificial resins, and cellulose esters and ethers, n.e.s.	279	6,922	
Office and stationery supplies (not paper or printed matter)	79	}	8,805
Miscellaneous manufactured goods, n.e.s.	(b) 8,196		
<i>Commodities not available for separate publication</i>	43,421	—	
<i>Commodities not elsewhere classified</i>	18,150	—	
Total merchandise trade	4,429,575	1,863,332	
<i>Non-merchandise trade</i>	41,295	—	
Total recorded trade	(c) 4,470,870	1,863,332	

(a) Refer to Section 1 regarding coverage. ships' stores valued at \$20.0m.

(b) Excluding details of some items not available for separate publication.

(c) Including

The next table shows the destinations of the major overseas exports of Queensland.

DESTINATIONS OF MAJOR OVERSEAS EXPORTS (a), QUEENSLAND
(\$'000)

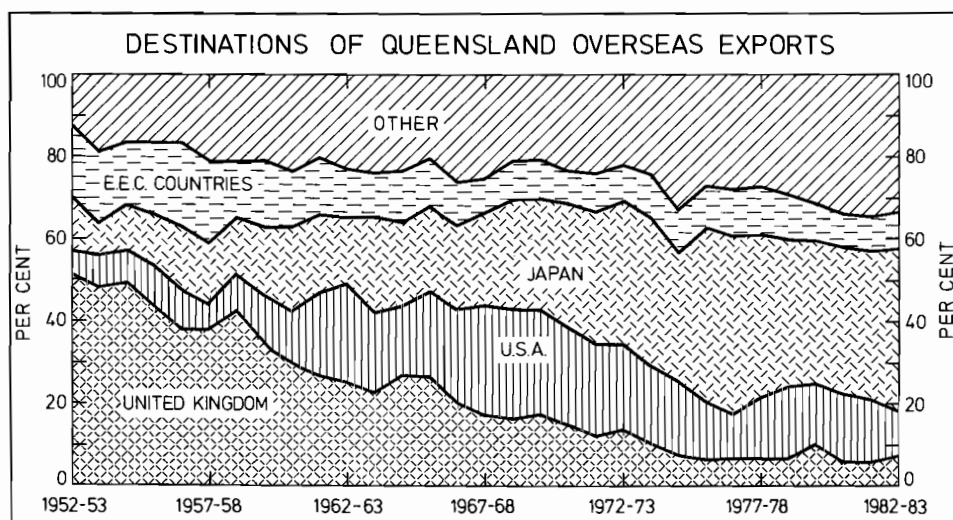
Year	Wool	Meat (b)	Sugar	Coal (c)	Cereal grains
<i>Canada</i>					
1977-78	—	18,304	95,493	—	—
1978-79	—	21,981	42,713	—	—
1979-80	—	31,859	92,754	—	3
1980-81	—	26,625	168,325	—	87
1981-82	—	23,682	104,028	—	50
1982-83	—	20,672	70,490	—	30
<i>European Economic Community (d)</i>					
1977-78	19,687	6,920	—	138,293	425
1978-79	33,329	11,294	—	126,262	424
1979-80	38,333	12,773	—	109,736	919
1980-81	36,885	17,610	—	125,949	750
1981-82	35,689	7,226	—	133,679	751
1982-83	42,636	7,785	—	160,551	325
<i>Japan</i>					
1977-78	33,164	73,527	217,667	628,469	46,229
1978-79	37,235	118,170	224,686	582,085	53,416
1979-80	32,171	178,499	270,369	682,621	56,201
1980-81	26,485	178,032	307,824	775,263	32,813
1981-82	22,469	176,905	140,124	841,249	95,301
1982-83	20,061	217,497	85,285	1,093,193	53,147
<i>United Kingdom</i>					
1977-78	2,709	5,966	3,318	15,440	250
1978-79	2,685	17,581	—	25,607	407
1979-80	2,731	12,996	—	33,863	852
1980-81	1,973	11,902	—	25,705	718
1981-82	2,013	15,503	—	41,382	900
1982-83	1,040	15,514	—	35,230	582
<i>United States</i>					
1977-78	1,712	171,564	79,856	2,568	—
1978-79	3,436	322,033	22,156	4,083	657
1979-80	1,863	304,313	49,221	1,864	—
1980-81	1,144	233,650	229,935	—	20
1981-82	3,539	205,422	180,154	873	11
1982-83	1,113	238,960	67,110	—	10
<i>Other</i>					
1977-78	29,966	104,186	131,879	63,431	50,193
1978-79	35,177	143,121	154,648	76,898	89,764
1979-80	48,900	123,922	249,043	92,418	176,946
1980-81	36,471	86,079	430,122	132,589	89,707
1981-82	48,336	124,357	333,720	222,054	175,096
1982-83	40,193	121,424	331,784	274,712	105,237
<i>Total</i>					
1977-78	87,238	380,467	528,213	848,201	97,097
1978-79	111,862	634,180	444,203	814,935	144,668
1979-80	123,998	664,362	661,387	920,502	234,921
1980-81	102,958	553,898	1,136,206	1,059,506	124,095
1981-82	112,046	553,095	758,026	1,239,237	272,109
1982-83	105,044	621,851	554,668	1,563,687	159,332

(a) From 1 July 1978 overseas export statistics comprise State of origin produce which was previously categorised by State of final shipment. (b) Including meat preparations and edible offal. (c) Including coke and briquettes. (d) Excluding United Kingdom.

The next table shows the quantities of overseas exports for main items.

QUANTITIES OF OVERSEAS EXPORTS, QUEENSLAND

Commodity	Unit	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Beef and veal, frozen etc. ..	'000 kg	309,424	346,521	265,303	224,297	260,299	254,061
Mutton & lamb, frozen etc. ..	'000 kg	8,518	8,294	5,575	6,363	4,370	5,003
Other meat, frozen etc. ..	'000 kg	19,710	24,985	19,005	17,809	17,097	15,172
Bacon and hams	'000 kg	119	141	133	115	155	213
Meat preserved	'000 kg	9,684	9,147	7,968	8,711	9,257	7,681
Butter	'000 kg	1,506	r 1,536	r 1,771	609	r 1,850	1,725
Milk and cream	'000 kg	10,611	12,440	10,856	8,728	9,915	9,395
Cheese	'000 kg	402	563	234	114	244	257
Eggs in shell	dozen	355,617	277,343	307,161	603,611	626,605	534,923
Eggs not in shell	'000 kg	1,215	1,508	914	1,588	931	893
Wheat	tonne	466,691	681,247	1,043,530	305,004	453,625	555,678
Barley	tonne	107,612	214,936	236,721	60,675	287,371	21,290
Sorghum	tonne	352,630	464,802	499,156	457,041	1,249,016	418,688
Flour, wheaten	'000 kg	26,057	17,310	12,605	10,439	3,095	2,971
Fruit juices	'000 L	1,358	1,287	3,223	2,978	2,152	1,535
Sugar	'000 kg	r 2,449,713	r 1,827,107	r 2,188,121	2,545,586	2,496,840	2,541,843
Molasses	tonne	169,582	74,450	74,964	132,669	191,004	186,218
Hides, horse and cattle ..	'000 kg	40,292	55,259	45,070	36,776	41,417	43,388
Skins, sheep and lamb ..	'000 kg	4,514	2,181	1,608	859	784	1,078
Animal fats	'000 kg	82,287	93,733	54,797	51,906	72,938	62,198
Coal	tonne	20,177,112	19,296,373	20,972,102	23,210,246	24,133,591	25,853,432
Copper	'000 kg	89,832	82,888	138,501	126,553	74,937	121,707
Lead	'000 kg	187,439	147,978	154,999	125,411	145,788	155,384
Zinc	'000 kg	119,345	119,888	76,393	99,544	145,983	221,935
Wool, greasy	'000 kg	41,912	49,848	49,187	35,694	37,160	36,614
Wool, scoured or other ..	'000 kg	1,868	1,793	1,474	1,076	1,174	733



4 IMPORTS

Overseas

Queensland's direct imports from overseas in 1982-83 were valued at \$1,994.6m, compared with \$2,179.8m in 1981-82. These imports embraced a wide variety of commodities. Machinery and transport equipment was the group with the highest value, and accounted for \$941.9m, or 47.2 per cent of the total, of which \$761.7m came from the United States and Japan.

Other important items of direct overseas imports in 1982-83 were: chemicals, \$96.0m; tyres, tubes, and other articles of rubber, \$38.1m; petroleum, \$264.4m; distillate fuels, \$28.0m; and paper and paperboard, \$35.9m.

Interstate

The great predominance of interstate imports in the total import trade of Queensland, 69.0 per cent in 1982-83, is an important feature of the State's external trade picture. Many of the commodities comprising this trade, however, came *through*, rather than *from*, other States. Interstate imports during 1982-83 totalled \$4,440.6m.

The most important group was machinery and transport equipment, which in 1982-83 was valued at \$1,007.6m, of which road vehicles and parts comprised \$401.3m. Other important items from other States were: iron and steel, \$400.0m; chemicals, \$436.0m; and clothing and footwear, \$257.2m.

Principal Items and Origin of Imports

The following table shows the principal items imported into Queensland from overseas and from other States of Australia for 1982-83.

OVERSEAS AND INTERSTATE IMPORTS, PRINCIPAL ITEMS, QUEENSLAND, 1982-83
(\$'000)

Commodity	From overseas	From other States (a)
<i>Food and live animals</i>	(b) 53,703	680,938
Cattle, live	586	75,412
Sheep, live	—	34,259
Other live animals	2,034	8,297
Meat: fresh, chilled, or frozen	968	15,696
Meat, preserved, and meat preparations	375	20,815
Milk and cream, fresh or processed	731	36,731
Butter, cheese, and eggs	2,416	43,772
Fish and fish preparations	20,594	23,641
Cereals and flour and meal thereof	1,409	10,072
Breakfast foods, prepared	659	15,158
Other cereal preparations, including biscuits	1,947	36,470
Fruit, fresh or dried	2,048	n.p.
Fruit, preserved, and fruit preparations	1,376	27,937
Nuts, edible: fresh, dried, or prepared	3,856	n.p.
Vegetables, fresh or frozen	1,802	9,419
Vegetables, roots, and tubers: preserved or prepared	3,692	12,576
Honey, sugar, and sugar confectionery	744	61,820
Coffee	(b) 1,456	58,128
Chocolate confectionery, cocoa, and preparations	(b) 241	68,825
Tea	(b) —	20,848
Feeding stuff for animals	3,896	9,928
Margarine and other prepared edible fats	—	12,651
Other food and food preparations	2,875	70,727
<i>Beverages and tobacco</i>	10,274	96,754
Non-alcoholic beverages (excluding fruit juices)	158	13,014
Wine, grape must, cider, and perry	1,347	42,963
Alcoholic beverages, n.e.s.	2,151	17,718
Tobacco	4,794	23,059
Tobacco manufactures	1,825	
<i>Crude materials, inedible, except fuels</i>	(b) 56,698	38,922
Hides and skins, undressed	17	n.p.
Rubber, crude (including synthetic or reclaimed)	506	13
Timber	20,172	15,217
Wood and other pulp, waste paper, and cork	6,514	n.p.
Wool fibres and other animal hair	184	n.p.
Fertilisers, crude	9,825	—
Crude minerals, metalliferous ores, and scrap	14,001	1,429
Mineral sands	—	—
Other	(b) 5,480	7,589

OVERSEAS AND INTERSTATE IMPORTS, PRINCIPAL ITEMS, QUEENSLAND, 1982-83—continued
(\$'000)

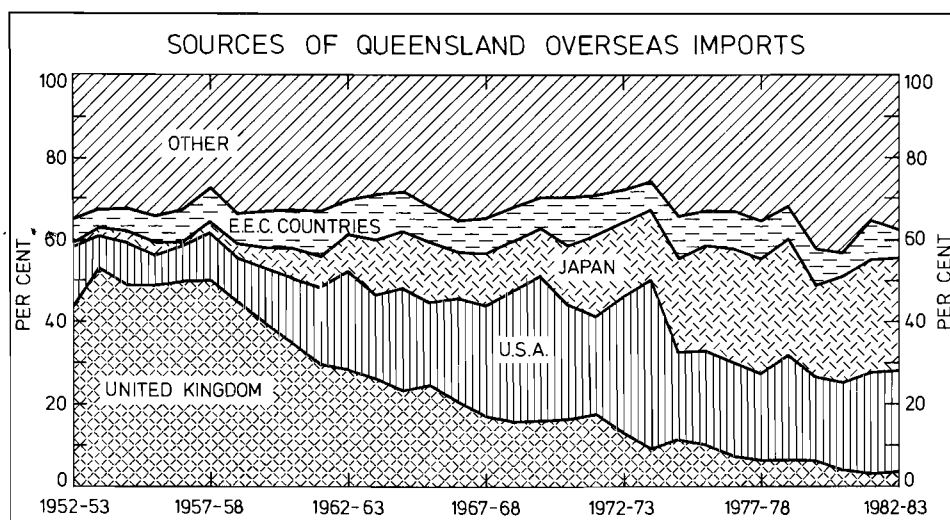
Commodity	From overseas	From other States (a)
<i>Mineral fuels, lubricants, and related materials</i>	366,079	575,011
Petroleum, crude and partly refined	264,432	n.p.
Motor spirit, automotive and aviation	31,300	67,016
Kerosene, jet fuel, mineral turpentine	4,986	n.p.
Distillate fuels	27,983	97,300
Residual fuel oils (except enriched)	26,147	42,525
Lubricating preparations containing petroleum products	5,644	47,446
Other petroleum products and gases and coal	5,588	16,923
<i>Animal and vegetable oils and fats</i>	8,817	11,705
Fixed vegetable oils and fats	4,925	9,046
Other animal and vegetable oils and fats	3,893	2,659
<i>Chemicals</i>	(b) 95,979	436,049
Chemical elements and compounds	(b) 36,022	39,722
Paints and dyeing, tanning, and colouring materials	2,219	48,103
Medical and pharmaceutical products	527	126,279
Essential oils, perfumery, cosmetics, and toilet preparations	1,390	57,524
Soaps and cleansing and polishing preparations	1,806	48,489
Fertilisers, manufactured	16,578	7,377
Explosives and pyrotechnic products	3,493	2,254
Plastic materials, regenerated cellulose, and artificial resins	(b) 14,080	51,850
Chemical materials and products, n.e.s.	19,864	54,451
<i>Goods classified chiefly by material</i>	(b) 263,848	1,004,118
Leather and manufactures of leather or artificial leather, n.e.s.	802	2,637
Materials of rubber	3,081	6,932
Tyres and tubes and other articles of rubber	38,139	78,793
Veneers, plywood, etc.	(b) 5,831	16,976
Paper and paperboard	35,936	52,250
Articles made of paper, pulp, or paperboard	3,581	65,715
Textile yarn and thread	(b) 5,394	11,270
Textile fabrics	26,582	26,903
Sacks and bags used for packing of goods	4,436	3,220
Made-up articles of textiles (not clothing)	6,122	22,211
Floor coverings, tapestries, etc.	5,200	23,631
Glass and glassware	(b) 9,876	19,260
Tableware and domestic ware of china or pottery	5,120	5,821
Non-metallic mineral manufactures, n.e.s.	18,955	13,221
Iron and steel		
Pig, ingots, and other primary forms	2,934	1,596
Bars, rods, angles, shapes, and sections	5,413	116,354
Universal plates and sheets	13,929	109,194
Hoop and strip	1,612	74,431
Railway and tramway track materials (including rails)	101	n.p.
Wire (excluding wire rod)	2,651	50,499
Wire netting	367	n.p.
Barbed wire	193	n.p.
Tubes, pipes, and fittings	16,509	12,248
Castings and forgings, unworked, n.e.s.	18	3,001
Non-ferrous metals and alloys	5,631	83,579
Finished structural parts and structures of metal, n.e.s.	1,517	25,195
Other wire products of any metal	5,077	13,810
Nails, screws, nuts, bolts, etc. of iron, steel, or copper	(b) 3,548	19,392
Tools for use in the hand or in machines	(b) 11,497	21,098
Cutlery	2,128	9,368
Household equipment of base metals, non-electric	4,636	10,547
Manufactures of metal, n.e.s.	12,653	68,257
Other	4,381	4,018
<i>Machinery and transport equipment</i>	(b) 941,927	(b) 1,001,496
Power generating machinery other than electric motors and generators	52,920	22,540
Agricultural and horticultural machinery	17,055	31,111
Tractors	36,619	22,549
Office machines, electric and non-electric	(b) 6,127	14,020

OVERSEAS AND INTERSTATE IMPORTS, PRINCIPAL ITEMS, QUEENSLAND, 1982-83—*continued*
(\$'000)

Commodity	From overseas	From other States (a)
<i>Machinery and transport equipment—continued</i>		
Metal working, textile, and leather machinery	13,194	13,858
Other machines, appliances, and parts, except electrical, n.e.s. ..	(b) 244,821	150,685
Electric power machinery and switchgear	72,106	26,631
Equipment for distributing electricity	6,005	69,284
Telecommunications apparatus	(b) 38,028	69,214
Domestic electric and non-electric equipment	(b) 19,052	115,969
Other electric machinery and apparatus	25,557	(b) 50,626
Railway and tramway vehicles	3,380	13,059
Passenger motor cars	92,211	223,721
Trucks, vans, buses, and prime movers	161,312	(b) 41,050
Motor vehicle and tractor chassis, bodies, and parts	43,655	120,790
Other road vehicles	24,285	15,726
Aircraft, ships, and boats	85,602	(b) 664
<i>Miscellaneous manufactured articles</i>		
Sanitary, plumbing, heating, and lighting fixtures and fittings ..	(b) 129,885	588,422
Furniture	1,464	34,929
Clothing and accessories (not plastic)	10,047	18,115
Footwear, gaiters, and parts	12,846	210,932
Scientific, medical, etc. measuring and controlling apparatus ..	6,275	46,318
Photographic and cinematographic supplies	(b) 20,797	18,070
Watches, clocks, musical instruments, etc.	(b) 2,802	26,836
Printed matter	9,682	25,715
Articles of plastic or artificial resins, cellulose resins, etc. ..	18,630	36,246
Perambulators, toys, games, and sporting and travel goods ..	13,661	50,779
Office and stationery supplies, n.e.s.	(b) 19,964	48,924
Miscellaneous manufactured goods, n.e.s.	1,706	16,963
Commodities not available for separate publication	12,011	54,598
Commodities not elsewhere classified	40,807	6,074
Total merchandise trade	8,239	—
Non-merchandise trade	1,976,258	4,439,489
Total recorded trade	18,351	1,136
	1,994,608	4,440,625

(a) Refer to Section I regarding coverage.

(b) Excluding details of some items not available for separate publication.



The next table shows the origins of the major overseas imports of Queensland.

ORIGINS OF MAJOR OVERSEAS IMPORTS, QUEENSLAND
(\$'000)

Year	Mineral fuels etc. (a)	Chemicals (b)	Materials of rubber (c)	Paper and paperboard	Road vehicles	Textile fabrics (d)
<i>Canada</i>						
1977-78	4,051	2,321	30	1,565	828	205
1978-79	45	2,019	64	2,409	638	140
1979-80	42	5,800	85	1,997	1,722	158
1980-81	22	5,376	189	4,585	4,994	94
1981-82	565	9,384	307	6,582	2,893	124
1982-83	23	6,756	155	7,224	1,500	25
<i>European Economic Community (e)</i>						
1977-78	1,155	9,951	1,856	657	11,201	1,321
1978-79	439	9,375	2,317	845	19,442	1,821
1979-80	12,084	9,610	2,942	1,139	8,082	2,354
1980-81	375	8,678	2,991	1,769	6,537	3,071
1981-82	594	11,878	4,586	2,425	14,491	4,240
1982-83	599	10,092	4,316	3,143	13,097	4,644
<i>Japan</i>						
1977-78	42	10,656	9,162	2,315	105,117	5,085
1978-79	77	10,878	10,313	2,098	153,589	3,947
1979-80	545	13,036	12,849	2,178	163,314	3,968
1980-81	794	9,790	17,370	2,171	223,507	4,436
1981-82	748	13,765	21,323	3,763	284,264	5,264
1982-83	1,825	17,286	23,094	3,487	235,126	6,603
<i>United Kingdom</i>						
1977-78	458	5,367	2,576	321	2,532	2,461
1978-79	513	6,731	2,441	593	2,641	1,905
1979-80	9,110	7,883	3,746	718	1,852	2,076
1980-81	904	7,555	5,218	577	1,940	2,076
1981-82	1,053	7,291	2,995	595	2,567	1,697
1982-83	785	9,253	3,055	770	2,388	3,396
<i>United States</i>						
1977-78	408	23,679	2,883	1,344	29,356	1,809
1978-79	418	28,714	2,438	1,780	39,356	1,786
1979-80	756	30,299	2,777	1,766	44,202	3,129
1980-81	3,202	37,267	3,652	1,979	51,906	3,917
1981-82	15,134	35,667	5,302	2,569	74,695	5,927
1982-83	23,151	31,438	3,608	1,719	59,317	4,422
<i>Other</i>						
1977-78	126,250	6,038	3,260	11,581	12,010	14,985
1978-79	103,595	7,105	3,591	13,633	11,517	17,778
1979-80	289,880	10,415	6,640	15,156	17,424	16,288
1980-81	487,827	9,410	8,696	20,912	15,404	19,123
1981-82	361,785	13,421	9,959	23,075	15,573	22,304
1982-83	339,696	21,154	6,991	19,593	10,034	20,337
<i>Total</i>						
1977-78	132,364	58,012	19,767	17,783	161,044	25,866
1978-79	105,087	64,822	21,164	21,358	227,183	27,377
1979-80	312,417	77,043	29,039	22,954	236,596	27,973
1980-81	493,124	78,076	38,116	31,993	304,288	32,717
1981-82	379,879	91,406	44,472	39,009	394,483	39,556
1982-83	366,079	95,979	41,220	35,936	321,462	39,428

(a) Including mineral fuels, lubricants, and related materials.
from 1980-81.

(c) Including tyres and tubes.

(b) Excluding details of some items not available for separate publication,
(d) Including clothing.

(e) Excluding United Kingdom.

5 OVERSEAS AND INTERSTATE TRADE

Quantities of exports and imports for 1982-83 for selected major items are shown in the following table.

QUANTITIES OF CERTAIN COMMODITIES EXPORTED AND IMPORTED, QUEENSLAND, 1982-83

Commodity	Unit	Exports		Imports	
		Overseas	Interstate	Overseas	Interstate
Cattle and sheep, live	No.	42,085	920,055	51	2,093,402
Meat, fresh, chilled, or frozen	tonne	274,237	15,495	470	9,099
Meat, preserved or canned, and meat preparations	tonne	7,895	11,058	139	5,705
Milk and cream, fresh or processed	tonne	9,395	4,918	496	29,289
Butter and cheese	tonne	1,982		892	16,021
Fish, fresh and preserved, and fish preparations	tonne	7,744	(a) 818	6,452	5,858
Wheat	tonne	555,678	20	—	53
Other unmilled cereals	tonne	473,294	26,678	2,276	5,205
Flour and meal of wheat	tonne	2,971	27,879	3	n.p.
Cereal preparations	tonne	10,021	16,419	1,820	46,898
Sugar	tonne	2,541,843	n.p.	2	84,395
Honey, sugar confectionery, and other sugar products	tonne	3,763	(b)	335	27,947
Coffee	tonne	2	(b)	(a) 93	3,772
Tea	tonne	4	(b)	(a) —	6,016
Margarine, lard, and other rendered pig and poultry fats	tonne	827	n.p.	—	7,550
Alcoholic beverages	'000 litre	(a) 29	23,141	927	54,984
Tobacco and tobacco manufactures	tonne	629	7,661	1,065	3,616
Hides and skins	tonne	44,583	430	—	n.p.
Rubber, crude	tonne	1	(b)	525	13
Timber	cubic metre	(a) 389	7,569	97,399	85,389
Wool and other animal hair	tonne	37,659	n.p.	188	n.p.
Cotton fibres	tonne	22,127	n.p.	88	(b)
Fertilisers, crude	tonne	20,555	(b)	174,489	n.p.
Salt	tonne	33,894	(b)	54,798	2,052
Petroleum, crude and partly refined	'000 litre	—	(b)	1,214,334	n.p.
Motor spirit, automotive and aviation	'000 litre	1,475	(b)	131,797	n.p.
Kerosene, jet fuel, and mineral turpentine	'000 litre	31,506	(b)	17,778	n.p.
Distillate fuels	'000 litre	19,672	(b)	103,248	748,145
Residual fuel oils (except enriched residuals)	'000 litre	24,561	(b)	145,774	283,392
Fertilisers, manufactured	tonne	20,749	n.p.	127,514	34,392
Wood, peeled, veneer sheets, and plywood	'000 sq m	141	7,555	(a) 8,142	(b)
Copper and copper alloys	tonne	121,707	77,255	536	(b)
Lead and lead alloys	tonne	155,384	4,552	238	(b)

(a) Excluding details of some items not available for separate publication.

(b) Interstate figures not recorded separately.

6 OVERSEAS TRADE AT QUEENSLAND PORTS

The next table shows the value of overseas trade at each of the ports of the State. The export statistics in this table are compiled on a 'State of final shipment' basis and therefore will not correspond with the total shown as Queensland exports in earlier tables.

The figures in the table show only the value of the overseas trade handled by each port, and as such are not fully indicative of the relative importance of the various ports. For details of quantities of cargo handled at each of the ports, see Chapter 14, Transport and Communication, Section 2.

OVERSEAS TRADE AT QUEENSLAND PORTS
(\$'000)

Port	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Brisbane (a)						
Imports	732,553	864,514	1,062,293	1,499,180	1,528,268	1,484,414
Exports (b)	805,299	1,263,708	1,428,531	1,189,267	1,262,740	1,370,738
Maryborough						
Imports	122	144	104	167	59	52
Exports	—	—	699	36	—	1
Bundaberg						
Imports	809	519	342	232	606	878
Exports	139,234	51,456	96,576	122,621	97,026	61,773
Gladstone						
Imports	36,108	66,065	92,914	102,409	123,275	86,283
Exports	521,509	570,686	629,683	746,337	919,261	1,027,422
Rockhampton						
Imports	1,410	3,052	4,487	3,018	7,513	2,714
Exports	15,000	13,630	16,273	7,229	8,901	6,794
Mackay						
Imports	11,529	10,313	22,896	7,614	8,472	9,387
Exports	133,323	84,618	108,998	271,652	265,359	175,568
Hay Point						
Imports	—	—	—	—	—	—
Exports	581,968	533,330	652,532	667,734	794,187	812,479
Bowen						
Imports	7	9	19	—	497	23
Exports	5,848	5,408	7,176	9,188	16,299	1,117
Townsville (c)						
Imports	88,348	61,777	103,432	152,852	115,938	70,167
Exports	467,862	544,177	897,750	877,574	686,400	722,542
Innisfail						
Imports	—	—	—	—	—	—
Exports	—	59,310	117,694	179,969	106,643	70,736
Cairns (d)						
Imports	7,800	10,124	17,777	18,738	24,322	9,687
Exports	148,170	111,222	125,949	186,045	107,661	87,479
Cape Flattery						
Imports	—	—	—	—	—	—
Exports	1,709	2,895	3,691	3,332	3,962	2,585
Thursday Island						
Imports	110	1,760	1,697	1,938	2,327	1,947
Exports	1,439	1,289	1,929	1,789	1,300	2,053
Weipa						
Imports	8,382	9,733	15,093	13,823	14,530	56,056
Exports (e)	—	—	—	—	—	—
Total						
Imports	887,179	1,028,010	1,321,055	1,799,971	1,825,806	1,721,608
Exports	2,821,362	3,241,730	4,087,481	4,262,772	4,269,741	4,341,286

(a) Including Karumba, port of Brisbane.

(b) Including Weipa.

(c) Including Lucinda.

(d) Including Archer Point.

(e) Included with the

7 EXPORT PRICE INDEX

The Export Price Index measures changes in prices of all exports of merchandise from Australia. It includes re-exports of merchandise (that is, goods which are imported into Australia and exported at a later date without physical transformation).

The index is a fixed weights index on reference base 1974-75 = 100 and replaces a previous index which had a reference base of 1959-60 = 100. A detailed description of previous Export Price Indexes is contained in *Year Book Australia* No. 55, 1969, pages 256 and 257, and in *Year Book Australia* No. 58, 1972, pages 240 to 242.

The index items, i.e. the commodities directly represented in the index, were selected on the basis of their export values in the period 1974-75 to 1976-77. The selected items were allocated weights in accordance with the average value of exports for each item over the period 1974-75 to 1976-77. Many of the items carry not only their own weight but also the weight of unpriced commodities whose prices are considered to move in a similar manner. Full details of the weighting pattern of the Export Price Index, i.e. the percentage contribution for index items and groups, are available from the ABS on request.

In general, prices are obtained from major exporters of the selected items included in the index. The point of pricing for the Export Price Index is the point at which the goods physically leave Australia, i.e. prices are on the basis free on board (f.o.b.) at main Australian ports of export. As the prices used in the index are expressed in Australian currency, changes in the relative values of the Australian dollar and overseas currencies can have a direct impact on price movements for the many commodities that are sold in currencies other than Australian dollars. Where exports are sold at prices expressed in terms of a foreign currency and forward exchange cover is used, the prices used in the index exclude forward exchange cover.

The price series used relate to specified standards, grades, types, etc. of each commodity with the aim of incorporating in the index price changes for exports of representative goods of constant quality. Wherever possible, prices to predominant export markets are used for each of the specified goods priced, in order to lessen the impact of price variations attributable solely to changes, over time, in market destinations. In most cases prices are combined using fixed weights between markets. Weights between markets are reviewed from time to time and revised where necessary.

OVERSEAS EXPORT PRICE INDEX NUMBERS (a), AUSTRALIA
(Base of Each Index: Year 1974-75 = 100)

Year	Meat and meat preparations	Cereals and cereal preparations	Sugar and sugar preparations	Textile fibres and their wastes	Metalliferous ores and metal scrap	Coal, coke, and briquettes	All groups
1977-78 ..	154	81	72	139	151	176	128
1978-79 ..	234	86	74	153	157	178	144
1979-80 ..	285	107	95	181	189	180	174
1980-81 ..	274	121	143	190	207	189	185
1981-82 ..	250	120	92	200	231	231	187
1982-83 ..	279	123	67	206	264	270	203

(a) Index numbers for selected divisions of the Australian Export Commodity Classification (AECC).

The index shows that during 1982-83 prices of textile fibres and their wastes rose by 3.0 per cent, metalliferous ores and metal scrap by 14.3 per cent, and coal, coke, and briquettes by 16.9 per cent. Prices of cereals and cereal preparations rose by 2.5 per cent, sugar and sugar preparations fell by 27.2 per cent, and meat and meat preparations rose by 11.6 per cent. The net result was an increase of 8.6 per cent in the all groups index.

8 IMPORT PRICE INDEX

The Import Price Index measures changes in prices of imports of merchandise into Australia. Index numbers for any period relate to prices of imports landed in Australia during that period.

The index is a fixed weights index on reference base 1981-82 = 100.0 and replaces an index previously published by the Reserve Bank of Australia on reference base 1966-67 = 100.0.

The index items, i.e. the commodities directly represented in the index, were selected on the basis of their import values in the period 1978-79 to 1980-81. The selected items were allocated weights in accordance with the average value of imports for each item over this three-year period. Many of the items bear not only their own weight but also the weight of unpriced commodities whose prices are considered to move in a similar manner. Full details of the weighting pattern of the Import Price Index, i.e. the percentage contribution for index items and groups, are available from the ABS on request.

To compile the index, prices are obtained from major importers of the selected items directly included in the index. Prices are determined on a free on board (f.o.b.) country of origin basis. Freight and insurance charges involved in shipping goods from foreign to Australian ports are therefore excluded from the prices used in the index as are Australian import duties. As the prices used in the index are expressed in Australian currency, changes in the relative values of the Australian dollar and overseas currencies can have a direct impact on price movements of imports purchased in currencies other than Australian dollars. Where imports are purchased at prices expressed in terms of a foreign currency and forward exchange cover is used, the prices used in the index exclude such cover.

The price series used relate to specific standards, grades, types, etc. of each item, with the aim of incorporating in the index price changes for imports of representative goods of constant quality. In order to lessen the impact of price variation attributable solely to changes over time in the country of origin of imported goods, prices are obtained in respect of the predominant countries of origin for each of the specified goods priced. Prices are combined using fixed weights between countries of origin but these weights are reviewed periodically and revised where necessary.

OVERSEAS IMPORT PRICE INDEX NUMBERS (a), AUSTRALIA
(Base of Each Index: Year 1981-82 = 100.0)

Year	Food and live animals, chiefly for food	Mineral fuels, lubricants, and related materials	Chemicals and related products, n.e.s.	Manufactured goods classified chiefly by material	Machinery and transport equipment	Miscellaneous manufactured articles and non-monetary gold	All groups
1981-82 ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1982-83 <i>p</i> ..	111.6	109.2	106.7	109.4	112.0	112.2	110.4

(a) Index numbers for selected sections of the Australian Import Commodity Classification (AICC).

The index shows that during 1982-83 prices of food and live animals, chiefly for food, rose by 11.6 per cent, mineral fuels, lubricants, etc. by 9.2 per cent, chemicals and related products by 6.7 per cent, manufactured goods classified chiefly by material by 9.4 per cent, machinery and transport equipment by 12.0 per cent, and miscellaneous manufactured articles and non-monetary gold by 12.2 per cent. The net result was an increase of 10.4 per cent in the all groups index.

9 ASSISTANCE TO TRADE AND INDUSTRY

Commonwealth Government legislation affecting overseas trade includes: the Customs Act, the Customs Tariff Act, and the Customs Tariff (Anti-dumping) Act. The Customs Tariff Act provides the statutory authority for imposing the actual rates of duty operative from time to

time, while the Customs Tariff (Anti-dumping) Act provides protection for Australian industry against various forms of unfair trading.

The Commonwealth Government is assisted in administering the above legislation by the Industries Assistance Commission and the Temporary Assistance Authority, whose general purpose is to act in an advisory capacity. The activities of these two Government Authorities are discussed in more detail later.

Encouragement of overseas trade is effected by various trade services which include: the Trade Commissioner Service; export market development grants; the Export Finance and Insurance Corporation; the Agent-General; and the Commissioner for Queensland. These are also discussed in more detail later.

Industries Assistance Commission

The Industries Assistance Commission is an authority, set up under the *Industries Assistance Commission Act 1973*, whose function is to advise the Commonwealth Government on the assistance which should be given to domestic industries in the primary, secondary, or tertiary sectors. The Commission holds public inquiries into the industries concerned and submits its advice to the Government by way of public reports. Many different forms of assistance can be examined by or referred to the Commission, including matters not directly involving assistance, such as the reduction of import duties for the purpose of international trade agreements.

There are certain matters which the Minister is required to refer to the Commission for inquiry and report, before action is taken by the Government. These matters concern the proposed variations in long-term assistance to industries in the primary or secondary sectors of the economy. The Commission itself has the power to initiate inquiries into those industries whose assistance has not been reviewed for at least 10 years in the case of industries assisted by means of duties on imports, or at least six years in the case of industries assisted by other means.

The Commission is required to report annually to the Government on its operations and on the general structure of industry assistance in Australia and its effect on the economy.

Temporary Assistance Authority

This Authority was created under the *Industries Assistance Commission Act 1973*. The Minister for Administrative Services may request the Authority to inquire into those cases where urgent action appears necessary to protect an Australian industry against import competition, pending receipt and consideration of a full report by the Industries Assistance Commission. The Temporary Assistance Authority's report must be submitted to the Minister within 45 days of the making of the request. Temporary protection recommended by the Temporary Assistance Authority may be provided only if the matter is under reference to the Industries Assistance Commission and may operate only for a period of up to three months after the date of receipt by the Commission of the final report on the goods concerned.

Trade Commissioner Service

This service plays an important role in the stimulation of interest abroad in Australia's exports. In late 1982 Australia had 162 Trade Commissioners and Assistant Trade Commissioners in Australia and in 53 posts in 43 other countries.

Some of the services provided for Australian exporters and export organisations, as part of the Trade Commissioner's general responsibility for commercial intelligence of a particular territory, are: surveys of market prospects; advice on selling and advertising methods; arranging introductions with buyers and agents; providing reports on the standing of overseas firms; advice and assistance to business visitors; helping to organise and carry through trade missions, trade displays, and other promotion and publicity methods; providing information on import duties,

import licensing, quarantine and sanitary requirements, and other factors affecting the entry and sale of goods; and helping to attract desirable investment.

Trade Commissioners in some countries also take part in economic and commercial negotiations between governments. Also, in certain countries, where Australia does not have a diplomatic or consular mission, Trade Commissioners act as the Australian representative.

Export Market Development Grants

These grants, authorised under the *Export Market Development Grants Act 1974*, are administered by the Export Development Grants Board to encourage existing Australian exporters and prospective exporters to seek out and develop overseas markets for products, services, etc. The scheme operates by way of taxable grants, to a maximum of \$200,000, in relation to eligible expenditure incurred on overseas market research and development.

To reward improved export performance, the Board also administers the *Export Expansion Grants Act 1978*. Grants, which are taxable, are calculated on a formula applied to the increase in exports in a grant year over the average annual exports in the three immediately preceding years. The scheme expired in mid-1983.

Export Finance and Insurance Corporation

The Export Finance and Insurance Corporation (EFIC) was established by the Commonwealth Government in 1975 to provide Australian exporters with a specialised range of insurance guarantee and finance facilities not normally available from commercial sources. EFIC took over the functions of the Export Payments Insurance Corporation which had been operating since 1956.

Agent-General for Queensland

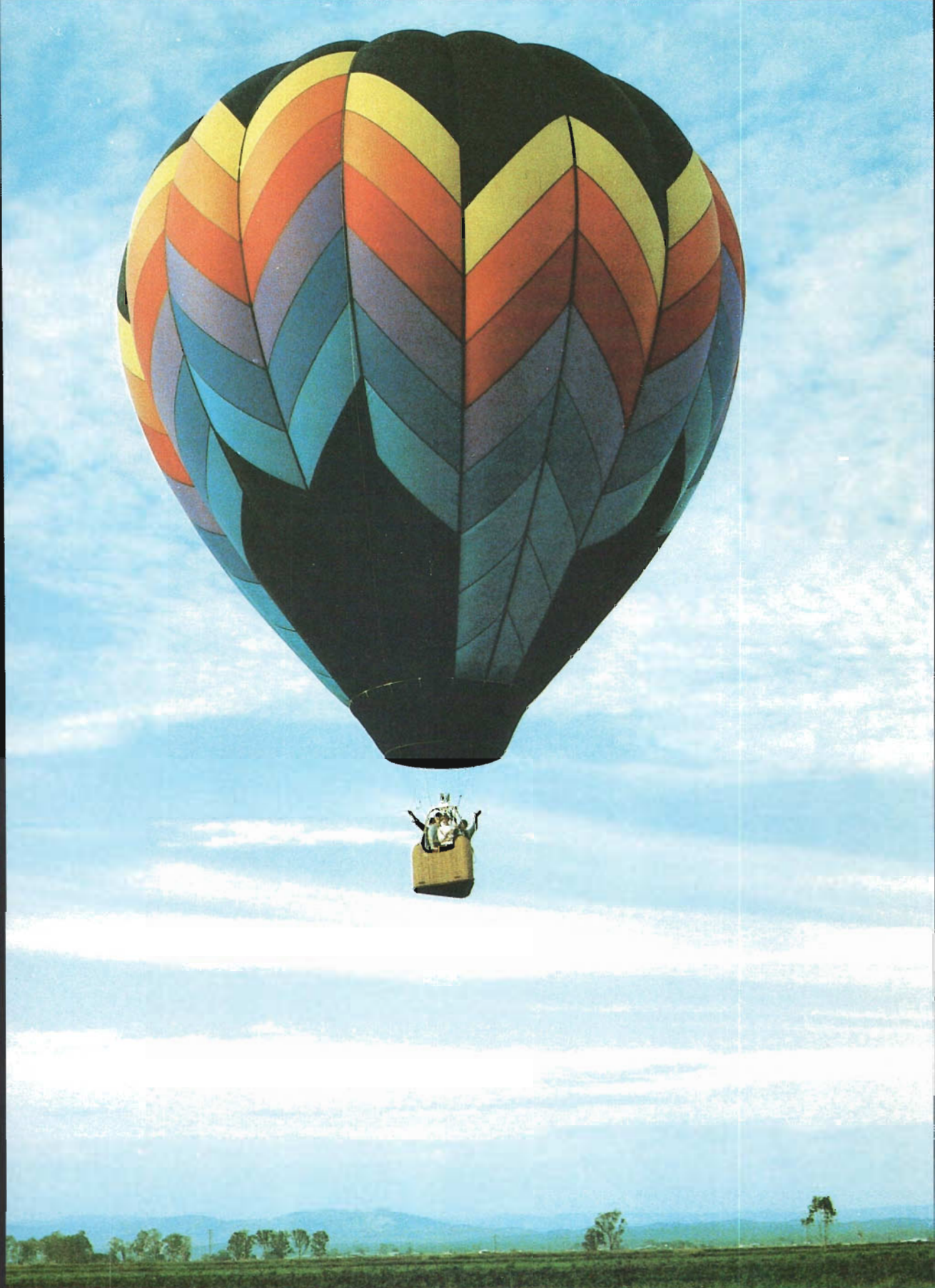
The London office of the Agent-General deals with such matters as: general promotion; the encouragement and establishment of industry and commercial undertakings; financial investment; migration; government purchasing and inquiries; ceremonial and protocol; reception and hospitality; and general representation and care for the interests of the Government and people of Queensland in the United Kingdom and Europe.

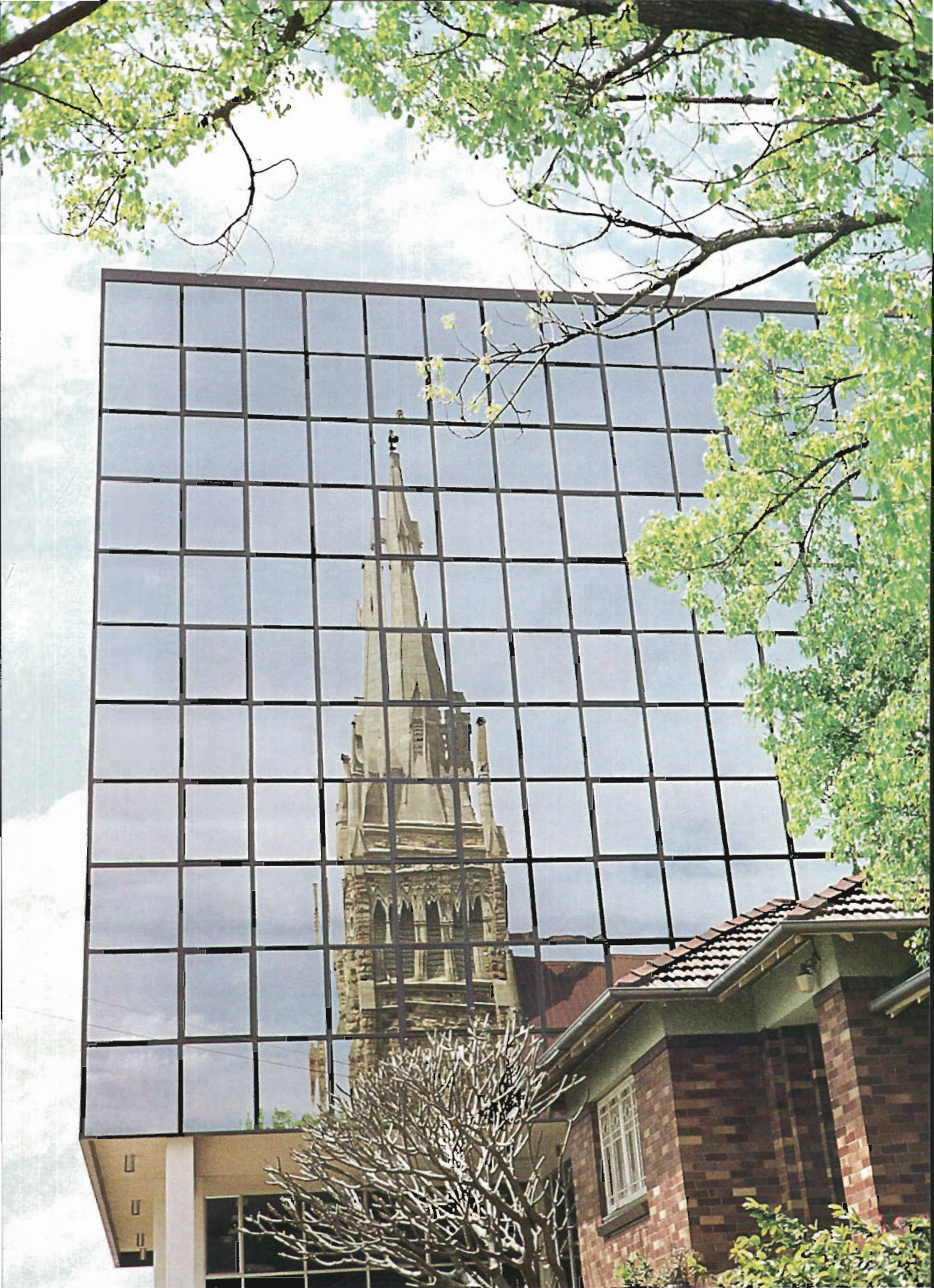
Commissioner for Queensland

On 8 November 1979 the Government of Queensland appointed the first Commissioner for Queensland to Japan, the appointment being for a period of six years. His functions are to consolidate growing and close trade, investment, and cultural relations between Japan and Queensland.

Multilateral Trade Agreements

The General Agreement on Tariffs and Trade (GATT), which came into force on 1 January 1948, is a multilateral trade treaty designed to facilitate trading relations between participating countries by reducing tariff and other barriers to the free interchange of goods. The Agreement provides a framework within which negotiations can be held to reduce barriers to trade, and a structure for embodying the results of such negotiations in a legal instrument. Features of the Agreement are the schedules of tariff concessions participating countries have negotiated with each other, the application of most-favoured-nation tariff treatment among the participants, the avoidance of other trade discrimination, and a code of agreed commercial policy for international trading. Each participating country retains the right: (i) to impose new or increased duties for protective purposes, except in respect of particular products where rates of duty have been bound against increase by negotiations under the Agreement; (ii) by negotiation to modify or withdraw concessions formerly agreed; (iii) to impose import restrictions to protect the balance of payments; and (iv) to take emergency action where any industry is endangered by reason of any obligation incurred under the Agreement.





An Anti-dumping Code came into force on 1 July 1968. The Code prescribes rules for the determination, investigation, and counter-action of injury caused by the dumping of goods on world markets.

Increased attention has been focussed in GATT on the specific trade and development problems of developing countries, and in February 1965 a new Part IV of GATT, aimed at helping developing countries solve these problems, was introduced on a de facto basis. It entered legally into force in June 1966.

Arising from their commitment under GATT, the developed countries have introduced the 'Generalised System of Preferences' (GSP) which offers tariff preferences on developing country products.

Australia's system of tariff preferences was introduced in 1966 (the first in the world) and was substantially revised and expanded from 1 January 1974. Further major reviews of the system took place in 1976, 1979, and 1981. The system covers most dutiable manufactured, semi-manufactured, and substantially processed primary products and offers margins of preference which are generally 10 to 15 percentage points below the general tariff rate.

Proposals for the addition or withdrawal of products are now referred to the Industries Assistance Commission for inquiry and report.

Bilateral Trade Agreements

Australia has entered into trade agreements with many other countries. Australia has no bilateral trade agreements with West European countries, the majority of whom are now members of the European Economic Community. The development of Australia's trade relations with the countries of East Europe began as part of a policy of market diversification away from West Europe in the mid-1960s.

For further information on the above bodies, agreements, etc. readers are referred to *Year Book Australia*.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Overseas and Interstate Trade (5402.3) (*annual*)

Central Office Publications

Foreign Trade, Part 1: Exports and Imports (5409.0) (*annual*)

Foreign Trade, Part 2: Comparative and Summary Tables (5410.0) (*annual*)

Australian Exports, Country by Commodity (5411.0) (*annual*)

Australian Imports, Country by Commodity (5414.0) (*annual*)

Export Price Index (6405.0) (*monthly*)

Import Price Index (6414.0) (*quarterly*)

Chapter 20

MARKETING

1 THE QUEENSLAND SYSTEM

Since World War I Queensland has developed a system of producers' organisations for the marketing of much of its primary produce. Legislation regarding commodity marketing prior to 1926 was consolidated in the *Primary Producers' Organisation and Marketing Act 1926-1983*. Some separate legislation was retained, however, for specific purposes. Under the Act, each marketing board is created on the basis of a poll of producers concerned and is established for a limited period. They usually comprise a number of growers' representatives, who are elected every three years, and a representative from the Queensland Department of Primary Industries.

The chief functions of each board are to arrange the sale of the commodity and the pooling of receipts, which may vary widely per unit over place and time depending on whether the sales are local, Australian, or overseas. All growers are required to market their produce through the relevant board. Generally these commodities are graded and advance payments made to growers according to grade, the first being made at the time of delivery. The boards also have powers to impose levies for specific purposes and in some cases have placed restrictions on the quantities of production that may be delivered to the board concerned. More detailed information regarding the marketing system in Queensland is available in the 1976 and previous editions of the *Year Book*.

2 AUSTRALIA-WIDE MARKETING SCHEMES

Commodities for which Australia-wide marketing schemes have been instituted include sugar, wheat, butter, cheese, dried fruits, tobacco, and eggs. The functions of these schemes are to promote orderly marketing, to equalise prices on a national level, and to stabilise returns to producers. In addition to these schemes, other bodies have been set up under Commonwealth Government legislation to organise and assist in overseas marketing of apples and pears, canned fruits, honey, meat, wine, and wool. Further details in regard to Australia-wide marketing schemes are available in the 1976 and previous editions of the *Year Book*.

3 SUGAR

The Queensland sugar industry is supervised through its production and marketing stages by the Commonwealth and Queensland Governments and by organisations of members of the industry.

Principal Acts relating to the sugar industry are the *Sugar Acquisition Act 1915-1982* and the *Regulation of Sugar Cane Prices Act 1962-1982* which are Queensland legislation. There is also a Sugar Agreement in force between the Commonwealth and Queensland Governments.

The main government agencies responsible for overall control of production and marketing in the industry are The Central and Local Sugar Cane Prices Boards which operate under the

Regulation of Sugar Cane Prices Act 1962–1982 and The Sugar Board constituted under the Sugar Acquisition Act 1915–1982.

Other associations concerned with the sugar industry in Queensland are the Australian Sugar Producers' Association Ltd, comprising both millers and growers, the Queensland Cane Growers' Association, the Proprietary Sugar Millers' Association Pty Ltd, and the Co-operative Sugar Millers' Association Ltd.

Production Peaks

Thirty sugar mills operate in Queensland and the control of their production is effected primarily by means of quotas, termed 'mill peaks', as recommended by the Central Sugar Cane Prices Board. These are expressed as tonnes of 94 net titre sugar. Mill peaks were introduced in 1929 when the aggregate was set at 621,241 tonnes of 94 net titre sugar. For the six seasons to 1983 the aggregates have been as follows: 1978, 2,793,970 tonnes; 1979, 2,794,380 tonnes; 1980, 2,888,200 tonnes; 1981, 3,080,000 tonnes; 1982, 3,171,200 tonnes; and 1983, 3,171,760 tonnes.

Control of individual farm production is provided by farm peaks which are determined annually by the Local Cane Prices Boards and incorporated in their awards. The amount of cane to be accepted from each grower is defined, subject to the provision that any deficiencies in the supply by some growers may be filled by other growers having cane available above their peak quota, but from within the net area of their assignment.

Assignments

The Central Sugar Cane Prices Board assigns areas of caneland to growers, who are allocated individual farm peaks. For each mill area, the aggregate of assignments should be capable of producing the mill peak. At 30 June 1983 there were 6,505 assignments and an assigned area of 360,201 hectares.

Sugar Marketing

Sugar is marketed in Australia under the terms of an Agreement between the Commonwealth and Queensland Governments. The present Agreement, the Sugar Agreement 1979, entered into force on 1 October 1979 and is due to expire on 30 June 1984. Under this Agreement the Commonwealth Government agrees to maintain an embargo on sugar imports. For its part, the Queensland Government agrees to control the production of sugar, acquires all raw sugar produced in Queensland and purchases the raw sugar produced in New South Wales, makes sugar and sugar products available in Australia at prices and on conditions determined in accordance with the Agreement, meets the costs of rebates on the sugar content of products exported, and contributes to the Fruit Industry Sugar Concession Committee to assist the Australian fruit-growing and fruit-processing industries.

The Sugar Board advises and acts for the Queensland Government on matters concerning raw sugar acquired in Queensland and raw sugar purchased from New South Wales. The Board's functions encompass the quantity and quality of raw sugar accepted for marketing, the storage, freighting, and marketing of raw and refined sugars, and the payment of the net proceeds of sales to mills.

The Queensland Government contracts each year with CSR Limited and Millaquin Sugar Company Pty Limited, for the refining and marketing of sugar for the domestic market. The two companies also attend to the collection of sales proceeds and the payment of charges incurred.

Sugar is sold in Australia at prices related to the ex-refinery price for bulk manufacturer's refined sugar (formerly IXD grade) incorporated in the Sugar Agreement 1979. The price operating with effect from 1 July 1983 was \$480.37 per tonne. It is subject to adjustment on 1 July each year.

Under its contract, CSR Limited also carries out the export marketing of all Australian raw sugar and also undertakes to provide seasonal finance necessary to meet progressive payments to mills.

Sugar Pools

All sugar is pooled for marketing. Raw sugar up to the quantity provided for in each mill's peak is allocated to No. 1 Pool which comprises the proceeds of sugar sold: (a) on the domestic market; (b) under long-term export contracts; and (c) on the free market, until such time as a sufficient quantity has been sold from each season's crop which will, with (a) and (b) above, equal the total production within mill peaks.

All sugar in excess of mill peaks is called excess sugar. Excess sugar from assigned land and within a quantity determined by The Sugar Board each season is termed 'third quota' sugar and is allocated to No. 2 Pool. 'Fourth quota' sugar is that made from cane grown on unassigned lands or delivered in excess of the quantity determined for acceptance by The Sugar Board.

Details of the quantities, prices, and total realisations for pooled sugar in Australia are set out in the next table. The table does not include the small amounts of sugar sold locally by mills.

RAW SUGAR: DISPOSAL AND RETURN TO PRODUCERS, 1982 SEASON
(Source: The Sugar Board)

Particulars	Queensland	N.S.W.	Total	Value of sales (a)	Average price per tonne (a)
	tonnes 94 n.t.	tonnes 94 n.t.	tonnes 94 n.t.	\$'000	\$
No. 1 Pool					
Home consumption	754,206	44,348	798,554	234,056	293.10
Surplus for export	2,361,383	138,852	2,500,235	505,047	202.00
Total	3,115,589	183,200	3,298,789	739,103	224.05
No. 2 Pool ('excess' sugar for export)					
Third quota	208,533	28,477	237,010	47,663	201.10
Other	33	—	33	—	1.00
Total	208,566	28,477	237,043	47,663	201.07
Total pooled sugar	3,324,155	211,677	3,535,832	786,766	222.51
Total for export	2,569,916	167,329	2,737,245	552,710	201.92

(a) Net return to producers, i.e. the milling and growing sections of the industry.

Sugar Exports

About one quarter of the sugar produced in Australia goes to meet domestic consumption requirements and the remainder is exported. Nearly all sugar exports consist of bulk raw sugar. Small amounts are exported as refined sugar primarily to nearby Pacific islands.

In May 1982 agreement was reached to extend the life of the 1977 International Sugar Agreement until the end of 1984. Basic export tonnages for 1983 and 1984 were established at the 1982 level. The basic export tonnage for Australia is 3,329,263 tonnes raw value. It was also decided to accumulate a total of one million tonnes of special stocks by 30 June 1982 and a further 1.5 million tonnes by the end of December 1983.

Details regarding the quantities of Queensland sugar exported are available in Chapter 19, External Trade, Section 3.

Sugar Statistics

Production of sugar in Queensland is dealt with in Chapter 16, Agricultural Industries, Section 4. The next table shows the disposals of Australian sugar, at 94 net titre, by The Sugar Board for the last six seasons.

AUSTRALIAN RAW SUGAR MARKETING
(Source: The Sugar Board)

Season	Sales			Proportion exported
	Home consumption	Export	Total	
	'000 tonnes 94 n.t.	'000 tonnes 94 n.t.	'000 tonnes 94 n.t.	%
1977	783	2,559	3,342	77
1978	762	2,138	2,900	74
1979	773	2,189	2,962	74
1980	751	2,578	3,329	77
1981	778	2,656	3,434	77
1982	799	2,737	3,536	77

The next table shows the total realisations on sugar sold in Australia and overseas, and the average net prices paid for Australian raw sugar.

AUSTRALIAN RAW SUGAR: NET VALUES AND AVERAGE PRICES PAID TO MILLS
(Source: The Sugar Board)

Season	Value of sugar (a)			Average net price per tonne (94 n.t.)			
	Australian sales	Exportable sugar	Total	Australian sales	Exportable sugar	No. 1 Pool	Total pooled sugar
	\$'000	\$'000	\$'000	\$	\$	\$	\$
1977	117,402	509,152	626,554	149.90	198.95	196.07	187.45
1978	144,885	471,826	616,711	190.10	220.69	213.19	212.65
1979	182,859	662,177	(b) 845,036	236.60	302.50	281.69	285.31
1980	190,702	1,059,585	(b) 1,250,287	253.80	411.05	372.44	375.56
1981	205,785	739,938	(b) 945,723	264.60	278.57	278.94	275.41
1982	234,056	552,710	786,766	293.10	201.92	224.05	222.51

(a) Total pooled sugar, Queensland and New South Wales, net payment to mills for sharing between mills and growers. (b) After setting aside \$6.5m in 1976, and \$2.1m in 1979, 1980, and 1981 for port and terminal development.

Sugar Board Accounts

The next table shows the main receipts and disbursements of The Sugar Board.

THE SUGAR BOARD REALISATION AND DISTRIBUTION ACCOUNT
(Source: The Sugar Board)
(\$'000)

Particulars	1981-82 (a)	1982-83
Sales in Australia	285,965	307,345
Sales overseas	827,593	617,377
Total sales	1,113,558	924,722
Sundry income	2,661	2,742
Stocks at end of year	61,570	118,499
Charges on export sugar		
Freights	68,926	60,385
Other	12,155	8,536
Charges on Australian sales		
Refining and marketing	54,960	60,323
Freights	17,385	20,492
Other	5,809	7,422
Marketing, managing, finance, etc.	19,211	25,987
Bulk handling	21,747	19,686
Total expenses	200,193	202,831
Raw sugar purchases	945,723	786,766

(a) Some 1981-82 figures have been amended as the format of the table has been changed to reflect current reporting in The Sugar Board's accounts.

4 WHEAT

State Wheat Board

The State Wheat Board operates under the *Wheat Pool Act* 1920–1983, and is the Queensland agent for the Australian Wheat Board. Its function is to arrange the delivery, grading, storage, and sale of wheat within Queensland.

The marketing of Queensland wheat is undertaken by means of a series of Australia-wide 'pools'. Most of the figures in the next table are subject to revision because it takes a considerable time to finalise marketing pools completely. Furthermore payments are made to growers on a progressive basis, so that returns shown for recent years are substantially incomplete.

WHEAT DELIVERIES TO THE STATE WHEAT BOARD AND RETURNS TO GROWERS (a), QUEENSLAND
(Source: State Wheat Board)

Season	Deliveries of Queensland wheat	Average return to growers at growers' sidings
	tonnes	\$ per tonne
1978–79	1,936,660	r 109.61
1979–80	803,484	r 130.80
1980–81	441,595	r 112.41
1981–82	r 1,430,796	r 108.36
1982–83	r 716,506	r 112.80
1983–84	1,843,380	107.55

(a) See paragraph preceding table.

The next table shows the sales of Queensland wheat made by the Board for various purposes, including interstate transfers of whole grain for flour milling, but does not include wheat retained by growers on farms for seed and feed, nor small quantities delivered by growers to agents in New South Wales licensed by the Australian Wheat Board. The sales are those made during the year shown and do not refer to grain from a particular harvest. All figures are expressed in terms of untreated wheat.

SALES OF QUEENSLAND WHEAT
(Source: State Wheat Board)
(⁰⁰⁰ tonnes)

Year	For use in Australia as				Overseas exports for use as		Total (a)
	Flour	Stock feed	Seed	Breakfast foods etc.	Grain	Wheat products	
1977	178	21	11	6	444	55	715
1978	179	24	12	5	402	39	661
1979	180	35	13	6	1,289	39	1,562
1980	192	86	16	6	143	25	468
1981	195	42	16	6	713	27	999
1982	198	50	17	6	882	1	1,154

(a) Including small amounts of wheat imported from other States.

Australian Wheat Board

Details in regard to the Australian Wheat Board and the marketing and pricing arrangements operative for the period 1 October 1979 to 30 September 1984 are available in *Year Book Australia*, No. 67, 1983, pages 325 to 327.

5 OTHER GRAIN CROPS

Barley

The Barley Marketing Board was constituted in 1930 and operates under the *Primary Producers' Organisation and Marketing Act* 1926–1983. The Board is responsible for the

marketing of all barley grown in Queensland. Some of the barley produced, however, is either held on farms for feed or seed, or sold interstate.

Barley is used for malting, manufacturing, and stock feed. For malting purposes, a high-grade low-protein grain is required. Barley with higher protein content is classified either as manufacturing grade or feed grade depending on quality. The Board also operates a seed barley scheme under which growers are selected to grow seed barley for the Board.

From 1977-78 the classification of barley was expanded to meet overseas market requirements. The new gradings of seed, malting, manufacturing, and feed replace the previous gradings of seed, malting, and milling (see page 288 of the 1978 *Year Book*). The seed grading is unchanged, malting is of a higher quality than previously, and manufacturing includes lower grade malting and higher grade milling barley. The balance is classified to feed barley.

The State Wheat Board acts as handling agent for the Barley Marketing Board and growers deliver grain to various Wheat Board depots.

THE BARLEY MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Barley Marketing Board)

Season	Deliveries	Exports	Average net return per tonne to growers at growers' sidings			
			Seed	Malting	Manufacturing	Feed
	tonnes	tonnes	\$	\$	\$	\$
1977-78	164,954	86,649	82.76	80.00	74.00	67.00
1978-79	489,461	393,651	67.12	65.00	61.00	56.00
1979-80	234,715	163,826	99.61	96.50	92.50	89.50
1980-81	91,454	44,815	135.96	131.75	127.75	124.75
1981-82	314,780	216,134	128.82	123.50	117.50	110.50
1982-83	169,332	13,543	162.04	158.75	134.95	120.54

Grain Sorghum

The Central Queensland Grain Sorghum Marketing Board was constituted in 1965 and controls the marketing of grain sorghum produced in Central Queensland. The remainder of the State is exempted from control.

The State Wheat Board acts as handling agent for the Board and growers deliver their grain to Wheat Board depots in Central Queensland. In addition, the Board itself has storage capacity for some 4,000 tonnes at Gladstone which is used mainly for local sales.

Grain sorghum is used primarily for stock feed and is an important source for supplementing other coarse grains for this purpose. As local requirements for grain sorghum in Central Queensland are limited, most sorghum received by the Board is exported, and shipped through the ports of Gladstone and Mackay.

CENTRAL QUEENSLAND GRAIN SORGHUM MARKETING BOARD OPERATIONS
(Source: Central Queensland Grain Sorghum Marketing Board)

Season	Deliveries	Value of sales	Average net payment to growers per tonne (a)	Quantity sold	
				Domestic	Overseas
	tonnes	\$'000	\$	tonnes	tonnes
1977	210,698	18,155	65.81	6,568	204,130
1978	193,354	16,093	64.48	7,686	178,387
1979	196,680	18,579	74.33	5,575	191,105
1980	267,128	29,923	92.02	14,100	253,028
1981	467,437	59,908	116.21	8,504	458,933
1982	393,855	43,688	98.16	23,094	370,761

(a) At growers' sidings.

Rice

The Rice Marketing Board was constituted in 1971 and operates under the *Primary Producers' Organisation and Marketing Act* 1926–1983 and is responsible for the marketing of all rice produced in Queensland. It has appointed as agent the Lower Burdekin Rice Producers' Co-operative Association Limited to handle the receiving, processing, and sale of the crop.

RICE MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Rice Marketing Board)

Harvest (a)	Rice production	Average payment per tonne to growers		Total payments to growers
		1st grade	Seed	
	tonnes	\$	\$	\$'000
Summer 1977–78	6,627	155	163	1,030
Winter 1978	6,303	188	196	1,185
Summer 1978–79	9,055	172	180	1,558
Winter 1979	6,109	172	180	1,054
Summer 1979–80	14,767	158	165	2,335
Winter 1980	9,920	183	191	1,822
Summer 1980–81	14,861	205	217	3,046
Winter 1981	6,726	197	209	1,326
Summer 1981–82	13,941	179	191	2,500
Winter 1982	7,704	195	207	1,505
Summer 1982–83	13,083	p 173	p 185	p 2,266
Winter 1983	8,334	p 197	p 209	p 1,644

(a) Summer harvest, December to January; winter harvest, May to June.

Maize

The Atherton Tableland Maize Marketing Board, established in 1923, controls the marketing of all maize produced on the Atherton Tableland. There is no control in other areas of the State. In 1982–83 the area under the control of the Board produced about 22 per cent of the Queensland output of maize. The balance of the crop was grown over a wide area of the State.

ATHERTON TABLELAND MAIZE MARKETING BOARD OPERATIONS
(Source: Atherton Tableland Maize Marketing Board)

Particulars	1977–78	1978–79	1979–80	1980–81	1981–82	1982–83
Net receipts of maize tonnes	19,096	22,800	14,013	19,766	20,577	21,544
Sales of maize tonnes	19,448	21,458	14,157	19,887	18,701	24,296
Average net payments to growers per tonne \$	72.32	70.48	84.96	103.43	100.97	114.50

6 DAIRY PRODUCTS

A voluntary butter and cheese price equalisation scheme administered by The Commonwealth Dairy Produce Equalisation Committee Limited operated before 1 July 1977. The effect of this scheme was to equalise domestic and export realisations from the sale of butter, cheese, skim milk powder, and casein among manufacturers.

Following an inquiry by the Industries Assistance Commission on dairy industry marketing arrangements, the former scheme was replaced by a mandatory one administered by the Australian Dairy Corporation. Stage I of the new marketing arrangements, which came into operation on 1 July 1977, provides for a levy/disbursement scheme on prescribed dairy products. It incorporates a levy based on the difference between the domestic market price and an assessed

average export price. Proceeds from the levy are utilised to make stabilisation payments to manufacturers across total production of each product to equalise their returns.

In addition, under the *Dairy Produce Act* 1924 the proceeds from all export sales of prescribed products are to be pooled separately. These arrangements ensure that all manufacturers receive an equalised return from domestic and export sales for each relevant product.

Stage II marketing arrangements, implemented from 1 July 1978, embodied a system of selective government underwriting directed at reducing the production of less profitable products while allowing scope for an increase in the production of more profitable products. Difficulties were encountered with the Stage II arrangements and selective underwriting was discontinued after one year. Stage I type marketing arrangements have been continued pending a further investigation by the Industries Assistance Commission.

The Butter Marketing Board

This Board, established in 1926, is concerned principally with the regulation of supplies to local and overseas markets and is the sole Queensland vendor of 'pat' butter in the Brisbane area.

Sales by the Board in 1982-83, including interstate production, totalled 10,428 tonnes, compared with 9,889 tonnes in 1981-82. The next table sets out particulars of sales.

BUTTER MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Butter Marketing Board)
(tonnes)

Particulars	1980-81		1981-82		1982-83	
	Local sales	Export sales	Local sales	Export sales	Local sales	Export sales
Pat butter	5,972	63	5,116	336	4,835	136
Bulk butter	785	—	902	—	785	—
Canned butter	23	—	26	57	20	33
Ghee	78	3,293	72	2,837	62	3,362
Pure butterfat	883	—	496	—	142	—
Butteroil blend and shortening	17	—	19	—	17	—
Other (a)	14	1,022	27	1	31	1,005
Total sales	7,772	4,378	6,658	3,231	5,892	4,536

(a) Including butter sold as butter concentrate on both local and export markets, and as ice cream mix on the export market.

The Cheese Marketing Board

This Board, which was constituted in 1923, fixes minimum intrastate wholesale prices, licenses manufacturers, agents, and wholesale dealers, and determines rates of commission, terms, etc.

Most Queensland cheese is sold on the local and interstate market, with small quantities being exported. Disposals of Queensland cheese, as supplied by the Board, during the three years 1980-81 to 1982-83 comprised 12,138 tonnes, 11,300 tonnes, and 11,500 tonnes, respectively.

Milk

The *Milk Supply Act* 1977-1983 was proclaimed on 20 May 1978 and the Queensland Milk Board was constituted on 1 June 1978. The functions of the Board are to regulate and control the production, collection, treatment, carriage, supply, delivery, storage, preservation, distribution, and pricing of milk throughout the State, excluding usage by processors for the manufacture of butter, cheese, ice cream, etc.

The control and inspection of milk supply throughout the State is achieved by the licensing of all producers, processors, carriers, and vendors (in both retail and milkshop trade).

Particulars of sales of pasteurised milk and cream throughout Queensland are set out in the next table.

SALES OF PASTEURISED MILK AND CREAM, QUEENSLAND
(Source: Queensland Milk Board)
(⁰000 litres)

Market	1980-81		1981-82		1982-83	
	Milk	Cream	Milk	Cream	Milk	Cream
Brisbane Milk District	109,055	812	111,952	801	112,798	1,811
All other Districts	148,303	2,016	156,019	2,432	159,993	2,853
Total	257,358	2,828	267,971	3,233	272,791	4,664

7 EGGS

Australian Egg Board

The overseas export of eggs and egg products is controlled by the Australian Egg Board which purchases stocks from the State Boards, while the latter are responsible for the packing, processing, and shipping on behalf of the Australian Board.

Most of Australia's exports of 2.7m dozen eggs in 1982-83 were shipped to Papua New Guinea, Indonesia, Hong Kong, and the Pacific islands; other significant quantities were sent to middle-east countries. Exports of egg products totalled 3,807 tonnes in 1982-83, most of which were shipped to Japan.

Queensland Egg Boards

Two Boards operate in Queensland to control the production and marketing of eggs within specified areas of the State. The Egg Marketing Board (South Queensland), constituted in 1923, covers an area in southern Queensland and handles most eggs through its premises in Brisbane. It also operates a depot at Toowoomba and, in addition, 10 country agencies and 10 distributors market eggs on its behalf. The Central Queensland Egg Marketing Board which commenced operations in 1947 covers an area centred on Rockhampton.

EGG MARKETING BOARDS OPERATIONS, QUEENSLAND
(Source: Queensland Egg Marketing Boards)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>South Queensland</i>						
Receivals						
Quantity '000 doz	20,055	20,229	20,301	21,890	21,408	23,937
Gross return to producers \$'000	16,918	18,025	19,522	23,983	25,117	28,994
Average net return per dozen (a) cents	71.24	73.42	85.26	97.06	104.55	105.25
Permit sales						
Quantity '000 doz	3,902	3,901	3,914	3,965	3,936	3,899
<i>Central Queensland</i>						
Receivals						
Quantity (b) '000 doz	1,749	1,858	1,827	2,195	2,033	2,301
Gross return to producers \$'000	1,525	1,661	1,753	2,360	2,386	2,833
Average net return per dozen (a) cents	73.53	73.77	84.32	94.65	101.45	107.62
Permit sales						
Quantity '000 doz	441	347	340	329	331	313

(a) Before hen levy of \$1.00 per hen a year.

(b) Excluding purchases from South Queensland.

Eggs handled by both Boards include only those from flocks registered under the Egg Industry Regulations. In addition, quantities of eggs are sold by growers direct to retailers and consumers under permit from the Boards.

8 WOOL

Wool Sales

Approximately 95 per cent of the Queensland wool clip is sold in Brisbane at public auctions organised by member firms of the National Council of Wool Selling Brokers and attended by both local and overseas buyers. Before wool is sold at these auctions it is appraised and valued by the Australian Wool Corporation. The Corporation, which has the authority to operate two separate price support schemes at auctions if necessary, introduced on a two year trial basis a limited offer to purchase scheme (LOPS) in Melbourne on 3 October 1977 and has since extended operations to Fremantle and Brisbane. The scheme is intended to operate essentially by obtaining economies of scale through ownership of large volumes of wool at the handling and selling stage. Advantages of the scheme for growers include reduction in standard handling charges, earlier payment, and a purchase price set on a current market price.

In 1982-83 the total amount of wool sold at Brisbane auctions was 55.1m kg which realised \$146.2m, averaging 265.25 cents per kg. This compares with the realisations in 1981-82 of \$147.2m from 56.8m kg, averaging 259.02 cents per kg. Some New South Wales wool was sold at these sales while some Queensland wool was sold at sales in Sydney and Newcastle.

BRISBANE WOOL MARKET (a)
(Source: National Council of Wool Selling Brokers)

Year	Sales	Bales sold	Wool sold	Amount realised	Average price per kilogram
	No.	No.	tonnes	\$'000	cents
1977-78	10	323,454	51,352	95,390	185.76
1978-79	8	311,838	51,443	105,718	205.51
1979-80	9	290,025	48,509	115,963	239.06
1980-81	(b) 9	229,434	38,823	102,594	264.26
1981-82	9	328,813	56,818	147,169	259.02
1982-83	8	321,542	55,105	146,169	265.25

(a) Including wool received from New South Wales, amounting to 14,613 bales (2,505 tonnes) in 1982-83. held at Yennora, Sydney.

(b) One sale by separation was

9 COTTON

The Cotton Marketing Board is a co-operative organisation and operates under the *Primary Producers' Organisation and Marketing Act 1926-1983*. The Board was established in 1926 when it took over from a previous organisation which promoted the development of the cotton industry. The Board is active in fostering production and marketing in Queensland. It distributes seed, advises of varieties, and assists in combating pests and promoting research and improved methods.

The Board operates ginneries at Biloela, Cecil Plains, St George, and Emerald, and processes by-products producing cotton-seed oil, meal, and linters at Brisbane. In 1982 its oil mill treated 20,476 tonnes of cotton-seed. The Board supplies cotton to Australian spinners and is responsible for the marketing of the exportable surplus.

COTTON MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Cotton Marketing Board)

Season	Raw cotton received		Average payments to growers for raw cotton	Total payments to growers
	tonnes	bales	cents per kg	\$'000
1977	7,019	30,849	104.1	7,305
1978	9,342	39,661	114.9	10,732
1979	13,265	58,998	124.5	16,511
1980	19,272	86,428	148.8	28,683
1981	21,779	96,511	122.0	26,509
1982	26,021	114,606	115.7	30,117

10 FRUIT AND VEGETABLES

Committee of Direction of Fruit Marketing (C.O.D.)

This organisation is a statutory authority constituted under the *Fruit Marketing Organisation Act 1923-1982* to represent Queensland fruit and vegetable growers on a wide range of industry matters, and to facilitate the marketing of Queensland-grown fruit and vegetables. It achieves this through a number of activities including its nine wholesale fruit and vegetable selling floors in the three eastern mainland States; five retail shops in Queensland country towns; and the running of special trains for collecting Queensland-grown fruit and vegetables from various centres in the State and distributing them throughout Australia.

The C.O.D. is the largest fruit and vegetable marketing organisation in Australia. It represents approximately 7,500 fruit and vegetable growers in Queensland. It is not compulsory for growers to make use of its services.

QUEENSLAND C.O.D. OPERATIONS
(Source: Queensland Committee of Direction of Fruit Marketing)
(\$'000)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82 (a)	1982-83 (a)
Wholesale department						
Queensland	33,544	35,279	40,092	48,601	47,576	57,612
Interstate	18,819	21,138	20,048	24,366	25,985	27,725
Total wholesale turnover	52,363	56,417	60,140	72,967	73,561	85,337
Freight transactions	3,990	4,104	4,566	4,925	5,390	6,886
Other activities (b)	7,639	8,718	10,073	11,142	16,302	13,515
Total turnover	63,992	69,239	74,779	89,034	95,253	105,738

(a) Excluding transactions between branches and departments within the C.O.D. and estate and bin hire.

(b) Including merchandise, retail, packing, cool storage, and estate and bin hire.

The Cannery Board

This Board was constituted under the *Fruit Marketing Organisation Act 1923-1982*. It owns, controls, and operates the Northgate Cannery which specialises in processing pineapples and fruit salad, and also produces jams, fruit juices, tinned beetroot, cordials, and aerated waters. Large quantities of canned pineapple are exported to overseas countries.

Growers supply pineapples for processing to the cannery in accordance with quotas set out on the number of \$100 face value certificates of subscription held by the growers in the cannery. These deliveries are to the No. 1 Pool and were set at 4.2 tonnes in 1982 for each \$100 certificate held. Other deliveries of pineapples are allotted to the No. 2 Pool.

The next table gives particulars of annual pineapple deliveries for canning. The year extends from 1 December to 30 November.

PINEAPPLE DELIVERIES FOR CANNING (BULK GRADE), QUEENSLAND
(Source: Queensland Cannery Board)

Particulars	1980			1981			1982		
	Deliveries	Rate per tonne	Value	Deliveries	Rate per tonne	Value	Deliveries	Rate per tonne	Value
	tonnes	\$	\$'000	tonnes	\$	\$'000	tonnes	\$	\$'000
Bulk grade									
No. 1 Pool	94,314	153.60	14,487	97,340	168.34	16,387	88,130	182.57	16,090
No. 2 Pool	6,342	43.00	273	8,137	87.90	715	4,184	118.85	497
Total	100,656	152.03	(a) 15,303	105,477	167.80	(a) 17,699	92,314	186.12	(a) 17,181

(a) Including incentive payments of \$543,000, \$597,000, and \$594,000, respectively, made for pineapples delivered in certain months.

Ginger

The Ginger Marketing Board was constituted in 1942, and is responsible for the marketing of all ginger produced in Queensland. The Buderim Ginger Growers' Co-operative Association Ltd acts as agent to receive, treat, and market ginger on the Board's behalf and to distribute the net proceeds of sales direct to growers.

The ginger root, or rhizome, is harvested in two stages. The early harvest provides a tender non-fibrous root suitable for table use as crystallised ginger or preserving in syrup, while the later harvest of the more fibrous rhizome is dried and ground for use in spices and flavouring.

Information, supplied by the Board, shows for 1982 the receipt of 1,701 tonnes of early harvest ginger, for which growers were paid at the rate of 37.0 cents per kilogram, and 2,716 tonnes of late harvest ginger, for which growers were paid 17.2 cents per kilogram.

11 OTHER FARM PRODUCTS

Peanuts

The Peanut Marketing Board, established in 1924, is responsible for the marketing of all peanuts produced in Queensland. The Board is associated with a co-operative organisation for the holding of assets at Kingaroy, Atherton, and Gayndah, chiefly silos for storage and machinery for shelling and grading. Sales by the Board during 1981-82 totalled 45,363 tonnes, comprising 36,647 tonnes as edible kernels, 12,890 tonnes for oil milling, and 1,175 tonnes as edible nuts in shell. All weights are on a nut-in-shell basis.

PEANUT MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Peanut Marketing Board)

Season	Quantity received (a)	Average price realised	Average price paid to growers	Average working expenses
	tonnes	cents per kg	cents per kg	cents per kg
1977	29,465	44.98	33.88	11.10
1978	31,643	52.61	41.27	11.35
1979	53,032	48.17	37.17	11.00
1980	33,690	58.17	45.16	13.00
1981	30,667	87.34	70.38	16.96
1982	45,363	67.16	42.05	25.11

(a) Nuts in shell.

Tobacco

The Tobacco Leaf Marketing Board began marketing functions in 1948 and operates through agents in both northern and southern Queensland and has power to handle leaf

delivered to it voluntarily by New South Wales growers. Each grower receives the proceeds of sale of his own leaf after deduction of administration levy and other charges.

TOBACCO LEAF MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Tobacco Leaf Marketing Board)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Quantities sold (a)						
Queensland leaf tonnes	7,674	8,298	7,890	7,962	7,485	8,077
New South Wales leaf tonnes	1,335	1,373	1,332	1,030	855	924
Total tonnes	9,009	9,671	9,222	8,992	8,340	9,001
Total realisations \$'000	31,940	35,317	35,619	37,907	37,409	41,890
Average price per kg cents	354.53	365.19	386.25	421.53	448.60	465.39

(a) Including small quantities of non-quota and experimental leaf.

Navy Beans

The Navy Bean Marketing Board was constituted in 1946 and operates under the *Primary Producers' Organisation and Marketing Act 1926-1983*. It is required to accept all navy beans grown in Queensland and to market them on behalf of growers. The Bean Growers' Co-operative Association Limited, which owns the grading and storage facilities, is the Board's sole agent, receiving, cleaning, grading, and storing beans.

NAVY BEAN MARKETING BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Navy Bean Marketing Board)

Particulars	1978	1979	1980	1981	1982	1983
Gross deliveries tonnes	9,031	5,463	1,687	2,375	6,920	1,129
Net deliveries (a) tonnes	7,916	4,838	1,361	2,033	5,950	960
Selling price (per kg) cents	55.00	55.00	60.00	84.00	91.50	87.50
Average net return to growers (per kg) .. cents	42.25	41.25	40.00	58.50	75.00	65.00

(a) Marketable beans.

12 MEAT AND FISH

Meat

Australian Meat Marketing Arrangements

The Australian Meat and Livestock Corporation, established under the *Australian Meat and Live-stock Corporation Act 1977*, commenced operations on 1 December 1977. The main functions of the Corporation are to encourage, assist, promote, and control the export of meat and livestock from Australia and to promote the sale of meat in Australia.

The next table shows Australian production and overseas export of meat by States.

PRODUCTION AND OVERSEAS EXPORT OF MEAT (a), AUSTRALIA
(^{'000} tonnes: Carcass weight and net shipped weight)

State or Territory	Beef and veal		Mutton and lamb		Total	
	Production	Exports	Production	Exports	Production	Exports
1980-81						
New South Wales	372.8	95.6	173.9	46.7	546.7	142.3
Victoria	360.2	97.2	215.5	96.9	575.7	194.1
Queensland	434.0	224.3	23.3	5.8	457.3	230.1
South Australia	93.8	25.0	67.9	40.1	161.7	65.1
Western Australia	126.6	40.7	75.6	44.1	202.2	84.8
Tasmania	37.7	12.2	17.4	4.6	55.1	16.8
Northern Territory	35.3	18.2	—	0.2	35.3	18.4
Australia (b)	1,467.2	513.4	579.3	238.7	2,046.5	752.1

PRODUCTION AND OVERSEAS EXPORT OF MEAT (a), AUSTRALIA—*continued*
('000 tonnes: Carcass weight and net shipped weight)

State or Territory	Beef and veal		Mutton and lamb		Total	
	Production	Exports	Production	Exports	Production	Exports
1981-82						
New South Wales	342.1	82.8	145.5	22.9	487.6	105.7
Victoria	367.5	98.3	191.4	64.2	558.9	162.5
Queensland	570.4	260.2	23.9	3.5	594.3	263.7
South Australia	100.8	35.7	61.6	20.5	162.4	56.2
Western Australia	122.8	38.4	62.4	25.4	185.2	63.8
Tasmania	41.6	13.0	19.2	5.8	60.8	18.8
Northern Territory	27.5	11.8	—	—	27.5	11.8
Australia (b)	1,580.1	540.3	508.6	142.5	2,088.7	682.8
1982-83						
New South Wales	371.2	107.9	154.8	28.2	526.0	136.1
Victoria	368.9	139.1	173.2	70.6	542.0	209.7
Queensland	501.1	265.4	23.6	5.2	524.6	270.6
South Australia	105.8	43.4	75.9	33.3	181.7	76.6
Western Australia	116.6	43.6	65.1	31.3	181.7	74.9
Tasmania	44.8	16.9	22.0	8.2	66.9	25.1
Northern Territory	31.6	14.4	—	—	31.6	14.4
Australia (b)	1,543.3	630.8	516.9	176.9	2,060.2	807.6

(a) All meats frozen, chilled, and cured. Excluding pigmeat, edible offal, and fancy meats.

(b) Including Australian Capital Territory.

Livestock and Meat Authority of Queensland

The *Meat Industry Act 1965-1983* provides for the operation of a Livestock and Meat Authority to advise the Queensland Minister for Primary Industries on meat and livestock industry matters generally and to administer defined policy.

The Authority has the responsibility for the licensing of all abattoirs, slaughterhouses, poultry slaughterhouses, knackers' yards, and public meat markets in Queensland. At 30 June 1983, 39 abattoirs, 123 slaughterhouses, 48 poultry slaughterhouses, 5 knackers' yards, and 46 public meat markets were so licensed. Thirty-four of the licensed abattoirs are privately-owned including 27 registered as export establishments. The remaining 5 abattoirs are publicly-owned service works of which 2, the Metropolitan Regional Abattoir and the Ipswich Regional Abattoir, are operated under the direct control of the Authority.

The meat industry legislation also provides for the declaration of regional meat areas in which the Authority may either provide slaughtering facilities or enter into agreements with local slaughterers or with the management of privately-owned abattoirs to provide slaughtering facilities for local operators for the production of meat for consumption within such declared areas. The Authority presently administers agreements with private abattoir owners under which slaughtering and associated services are provided for butchers in the Cairns, Mackay, Rockhampton, and South Burnett Regional Meat Areas.

The Metropolitan Regional Abattoir complex operated by the Authority includes the Brisbane abattoir and the Cannon Hill saleyards. The abattoir holds an export registration for the export of meat to most overseas destinations and, at 30 June 1983, provided service slaughtering for 118 operators, of which 15 were licensed wholesalers operating through the public meat market at the abattoir.

The Authority also provides the Queensland Livestock Market Reporting Service, which is an independent objective price reporting system issuing daily auction market information on cattle and sheep sales in the major selling centres of Brisbane, Toowoomba, Dalby, Rockhampton, Townsville, and Charters Towers. In addition, it currently is involved in research

into, and development of, other marketing innovations such as meat and carcass description systems, and consignment selling.

METROPOLITAN REGIONAL ABATTOIR OPERATIONS
(Source: Metropolitan Regional Abattoir, Brisbane)

Item	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
LIVESTOCK SOLD THROUGH CANNON HILL SALEYARDS (No.)						
Cattle	255,881	360,879	263,522	205,750	157,259	104,319
Calves	46,406	34,079	28,602	25,474	24,765	23,230
Sheep	214,088	165,550	135,749	131,826	91,895	42,877
Lambs	230,497	145,274	87,902	85,760	76,773	70,266
Pigs	23,620	15,342	14,703	16,173	10,902	6,471
LIVESTOCK SLAUGHTERED AT BRISBANE ABATTOIR (No.)						
Cattle	183,917	192,928	135,793	122,098	133,620	121,428
Calves	66,531	38,255	42,370	45,349	44,113	43,468
Sheep	122,223	128,309	249,550	315,125	200,351	186,223
Lambs	352,294	280,590	280,822	303,768	323,264	286,969
Pigs	60,784	40,571	43,772	56,497	79,398	59,607
Goats	n.a.	6,382	17,684	1,134	958	35
FRESH MEAT PREPARED FOR METROPOLITAN MARKET (tonnes)						
Beef	23,042	18,331	12,669	10,144	13,134	10,380
Veal	3,171	1,889	1,887	1,817	1,619	1,692
Mutton	1,017	805	807	612	929	939
Lamb	6,108	4,949	4,571	4,932	5,585	4,649
Pork	2,602	1,936	1,559	2,070	2,827	2,405
Goat meat	n.a.	8	194	—	—	—
MEAT PREPARED FOR OTHER PURPOSES (a) (tonnes)						
Beef	12,699	19,904	13,442	11,566	15,348	12,785
Veal	62	61	106	100	122	172
Mutton and lamb	1,278	1,838	3,695	5,145	3,305	2,469
Pork	—	186	710	325	1,014	643
Goat meat	n.a.	129	79	10	19	1

(a) For export, interstate, and processing trades.

Public Abattoir Boards

Public Abattoir Boards have been constituted under the *Meat Industry Act 1965-1983* for the Bundaberg, Toowoomba, and Townsville areas. The Boards each conduct abattoirs for their respective areas and provide service slaughtering for operators in those areas. In addition to servicing domestic requirements, the Toowoomba Public Abattoir is licensed to export meat to overseas destinations.

Fish

The Queensland Fish Board operates under the *Fish Supply Management Act 1972-1976*, and is responsible for the management and control of the supply and marketing of fish throughout the State. The following table sets out details of Fish Board operations.

FISH BOARD OPERATIONS, QUEENSLAND
(Source: Queensland Fish Board)

Particulars	1977-78 (a)	1978-79 (a)	1979-80 (a)	1980-81 (a)	1981-82 (b)	1982-83
Quantity of fish received .. '000 kg	4,234	4,124	3,538	4,029	3,844	2,442
Quantity of prawns received .. '000 kg	1,693	1,707	1,707	2,241	2,766	1,243
Net payment to suppliers (all seafood) \$'000	11,055	14,298	14,790	17,543	14,166	14,475
Value of fish marketed \$'000	5,433	5,977	6,439	6,816	6,357	4,654
Value of other seafood marketed .. \$'000	7,412	10,248	10,174	13,397	10,313	9,958

(a) Year ended 30 April.

(b) Figures for 14 months ended 30 June 1982.

13 COAL

Queensland Coal Board

This Board operates under the provisions of the *Coal Industry (Control) Act* 1948–1978. Its functions are to secure and maintain adequate supplies of coal throughout Queensland and for export, and to provide for the regulation and improvement of the coal industry. The State Government makes the Board an annual grant, which was \$100,000 in 1982–83. The balance of the Board's income is from contributions from colliery proprietors who supply coal to Australian consumers. The contribution is determined annually by the Board and is approved by the Governor in Council. The contribution is payable in four quarterly instalments and is based on the number of employees in the previous quarter. In 1982–83 these contributions amounted to \$440,000.

The next table shows details of sales as supplied by the Queensland Coal Board.

SALES OF QUEENSLAND COAL
(Source: Queensland Coal Board)
(‘000 tonnes)

Market	1977–78	1978–79	1979–80	1980–81	1981–82	1982–83
Local						
Electricity generation	4,540	4,520	4,882	5,346	5,653	6,709
Mineral processing	1,043	1,179	1,256	1,261	1,201	1,224
Cement works	264	269	270	244	332	332
Paper and board manufacturing ..	55	56	61	62	77	80
Coke works	54	56	53	66	53	66
Other (a)	74	73	107	140	182	205
Total local sales	6,030	6,153	6,629	7,119	7,498	8,616
Interstate	383	383	579	497	128	91
Overseas	20,118	18,836	21,296	23,727	24,862	26,405
Total sales	26,531	25,372	28,504	31,343	32,488	35,112

(a) Including hospitals, food processing, brickworks, potteries, and gas works.

Further References

Additional information on the topics covered in this chapter may be found in the annual reports of the Director of Marketing, Queensland Department of Primary Industries, and the individual marketing authority boards.

Chapter 21

PRICES

1 INTRODUCTION

The prices of many goods and services at various levels are collected at regular intervals. The main use made of this information is in the compilation of price index numbers which are designed to give a general indication of price movements in the field covered.

This chapter presents indexes of retail and wholesale prices, actual prices for selected commodities, including livestock, and briefly describes legislation relating to price control and consumer affairs.

2 RETAIL PRICE INDEXES

Retail price indexes assumed particular importance in Australia when they were adopted by arbitration and industrial authorities for use in the adjustment of wage rates for changes in price levels. The Commonwealth Court of Conciliation and Arbitration first used the retail price index for wage adjustment purposes in 1913. Automatic quarterly adjustments based on retail price index movements were introduced in 1921 and continued until 1953. State authorities have also made wage adjustments in the same way, at times on an automatic basis and at other times by considering the index in their proceedings. Between 1975 and 1981, movements in the Consumer Price Index were used as a variation basis for wages and salaries by the arbitration authorities in terms of guidelines and principles called 'wage indexation'. In September 1983, the use of the Consumer Price Index for wage adjustment purposes was reintroduced. For more information see Chapter 13, Wages and Industrial Conditions, Section 3.

Measurements of Price Movements

The official retail price index numbers given in the following pages have been designed to measure variations in retail prices for goods and services representing a high proportion of the expenditure of metropolitan wage and salary earner households. They do not measure the absolute cost of any standard of living, nor the absolute cost of changes in the standard of living. No retail price index measures changes in the cost of living that result directly from changes in the mode or level of living. Changes of that kind are matters for consideration apart from price indexes. But changes in prices of goods and services are a very important part of changes in the cost of living and it is this part which retail price indexes are used to measure. It is also important to realise that the Consumer Price Index measures only the movement over time in each State Capital City, Canberra, and Darwin separately. It is not a measure of price variability between Cities.

In compiling a retail price index the list of goods priced, the 'regimen', must comprise sufficient items, capable of standardisation, to represent as a group the general movement in retail prices of the goods and services purchased and consumed by households. The regimen must be a selected one because it is impossible in practice to ascertain at regular intervals prices

of every item of the goods and services entering into household expenditure. It is not necessary to include all the items people buy since many related items are subject to similar price changes. Key representative items are selected so that the index reflects price changes for a much wider range of goods and services than is actually sampled. The regimen is not, as is sometimes erroneously supposed, one which could be purchased with a certain 'basic' wage. Its items are representative of the fields covered, and are included in the index in proportions representing the consumption of all commodities in the field each represents.

The indexes measure, as accurately as possible, price variations, and price variations only. Those differences in prices which are solely due to substitution of a new item for one which has ceased to be available or in common use are neutralised by taking the price of the old item as typical of price variation in its class up to the time of substitution, and the price of the new item as typical of such changes in price thereafter.

Although changes in the consumption pattern occur continually, it is not possible to change weights applicable to items in an index frequently. While short-term fluctuations in consumption due to temporary imbalances between supply and demand have little effect on index weights, long-term consumption variations attributable to factors such as continued steady economic growth, development of significant new natural resources, technological advances, industrialisation, development or contraction of foreign markets, changes in the composition of the population, and so on, must lead to changes in weights, the introduction of new items, and perhaps the deletion of old items, if the index is to continue to be an accurate measure of variations in price levels. For these reasons it becomes desirable periodically to compile a new retail price index with items and weights more representative of current usage than those of the former index. Steps have been taken along these lines with the publication of the Consumer Price Index in which the items and weights are varied periodically in accordance with changing patterns of consumption.

Five series of retail price indexes were compiled at various times by the Australian Bureau of Statistics prior to 1960. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. A description of these indexes may be found in the 1977 and earlier issues of the *Year Book*.

Consumer Price Index

This retail price index was first compiled in 1960, retrospective to September quarter 1948. It replaced both the 'C' Series Retail Price Index and the Interim Retail Price Index in official statistical publications of the Bureau. Initially, series were compiled for the six State Capital Cities, with series for Canberra and Darwin being first published in 1964 and 1982, respectively. The title 'Consumer Price Index' is used for purposes of convenience and does not imply that this index differs in definition or purpose from previous indexes. It was adopted in conformity with world trends in naming indexes of retail prices paid by consumers, where these prices are weighted according to the pattern of consumption. For most practical purposes the terms 'retail prices' and 'consumer prices' are synonymous. The index is designed to measure, on a quarterly basis, the retail price variation of a very comprehensive list of commodities and services representing a high proportion of the expenditure of metropolitan employee households in Australia. Metropolitan employee households include households in the State Capital Cities, Canberra, and Darwin which obtain at least three-quarters of their total income from wages and salaries, but exclude the top 10 per cent (in terms of income) of such households.

The complete index is currently divided into the following groups: Food; Clothing; Housing; Household equipment and operation; Transportation; Tobacco and alcohol; Health and personal care; and Recreation and education. The Food group comprises a large number of items of groceries, dairy produce, meat, fruit and vegetables, meals out, and take away food;

Clothing includes representative items of most of the articles of men's, women's, boys', and girls' clothing and footwear, and piece goods; Housing comprises costs of home-ownership and allowances for private and government house and private flat rents (government flat rents in Canberra); Household equipment and operation includes fuel and light, furniture and floor coverings, drapery, household appliances, utensils and tools, and postal and telephone services; Transportation consists of private motoring expenses and urban transport fares; Tobacco and alcohol includes beer, wines, and spirits, cigarettes, and tobacco; Health and personal care includes services by dentists, doctors, hospitals, and health insurance funds and personal care products and services; Recreation and education comprises newspapers and magazines, holiday travel and accommodation, other recreation goods and services, and education and child care fees.

The timing and frequency of price collections were reviewed in 1982 and a number of changes were made. Currently, prices are collected weekly for fresh fruit and vegetables, fortnightly for fresh fish, and monthly for fresh meat, bread, cigarettes and tobacco, packaged alcohol, and petrol. Prices, together with details of dates of price change, are collected at the end of the quarter for milk, electricity and gas, insurance premiums (house, contents, and vehicle), postal and telephone charges, urban transport fares, motor vehicle purchase, motoring charges, alcohol (bar and restaurant sales), hospital and medical services, newspapers and magazines, and education and child care fees. Using the data collected, average quarterly prices are calculated for these items. For all other items, prices are collected once a quarter, with the exception of local government rates and charges, seasonal clothing, and lawn mowers, for which prices are collected once a year. Complete details, i.e. index numbers for each group and an all groups index number, are compiled and published on a quarterly basis.

The number of items actually priced is quite large. Several similar articles are often priced in order to suitably represent the various types and brands of similar commodities and services which are available. All prices are collected on a cash basis for the new article. Housing mortgage interest, consumer credit charges, and trade-in allowances are not included, although for major household appliances normal transaction prices are used.

The collection of retail prices for incorporation in the Consumer Price Index is undertaken by qualified field officers who visit the selected retail outlets to inspect the articles to be priced. Grades are specified, and, where necessary, samples are used to check the goods in reporting stores.

The index has been constructed so that it will reflect, as nearly as possible, the current pattern of consumption expenditure. To do this adequately it has been necessary to allow for the periodic addition of extra items, and changes in the weighting pattern (rather than retain a fixed list of items and set of weights unchanged over a long period). Ten series have been constructed for short periods and linked to form a continuous retail price index series. A description of the principal changes in the index up to the link of September quarter 1974 is contained in the 1976 issue of the *Year Book*. Details of the link effected at September quarter 1976 are shown in the 1981 *Year Book*. The latest link was made at March quarter 1982 and details of these changes are contained in the 1983 *Year Book*.

Brisbane

Consumer Price Index numbers for Brisbane, showing each group for six financial years and quarterly data for each of these years, are shown in the next table. Index numbers for earlier years are shown in the Appendix.

During the period 1974 to 1976 rates of increase were exceptionally high and it is necessary to go back to the period 1949 to 1951 to detect general increases of comparable magnitude. The index, however, has reflected a moderation in the rate of increase during recent years. The all

groups index rose by 8.5 per cent from December quarter 1976 to December quarter 1977, by 9 per cent in 1978, by 8.6 per cent in 1979, by 9.3 per cent in 1980, by 11.4 per cent in 1981, by 10.7 per cent in 1982, and by 8.3 per cent in 1983. Increases of 15.7, 13.8, and 14.9 per cent were recorded in 1974, 1975, and 1976, respectively.

CONSUMER PRICE INDEX (a) NUMBERS: GROUP INDEX NUMBERS, BRISBANE
(Base of Each Group Index: Year 1980-81 = 100.0)

Period	Food	Clothing	Housing	Household equipment and operation	Transportation	Tobacco and alcohol	Health and personal care	Recreation and education (b)	All groups
Year									
1977-78	70.3	82.0	80.4	79.4	74.5	74.4	95.0	n.a.	77.1
1978-79	77.6	87.8	85.8	85.0	81.9	88.8	84.8		83.4
1979-80	89.8	93.8	91.6	90.5	91.9	94.1	89.8		91.5
1980-81	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
1981-82	109.2	108.2	113.0	110.2	112.2	109.5	114.1		110.7
1982-83	119.6	116.3	128.0	122.1	124.7	123.4	134.1	107.3	122.9
Quarter									
1978: March	71.0	82.5	81.8	79.6	75.0	74.9	94.9	n.a.	77.8
June	72.5	84.3	82.8	82.3	76.1	75.6	99.2		79.3
September	73.8	85.0	83.9	83.9	78.4	75.9	101.9		80.8
December	75.9	87.5	85.3	84.7	81.3	98.7	77.7		83.3
1979: March	78.8	88.2	86.7	85.3	82.5	90.1	79.3	n.a.	83.8
June	81.8	90.5	87.3	86.0	85.5	90.3	80.4		85.7
September	84.3	91.7	88.8	87.9	88.0	92.4	81.3		87.7
December	87.3	93.2	91.0	89.4	91.4	93.3	91.0		90.4
1980: March	93.3	93.8	92.5	90.9	91.8	94.2	92.8	n.a.	92.8
June	94.3	96.6	94.0	93.7	96.2	96.4	93.9		95.0
September	95.4	97.4	97.1	97.1	96.3	98.2	96.4		96.6
December	99.1	99.1	98.7	99.5	98.0	99.2	99.5		98.8
1981: March	101.8	100.5	101.1	101.0	99.6	100.3	101.6	n.a.	100.9
June	103.7	103.0	102.4	102.4	106.1	102.2	102.5		103.6
September	106.5	103.9	107.5	105.5	105.9	106.0	103.8		106.0
December	108.7	107.9	110.9	109.6	112.1	108.6	115.2		110.1
1982: March	110.3	109.3	115.1	110.9	116.0	110.1	117.5	100.0	112.5
June	111.2	111.6	118.5	114.9	114.9	113.1	119.9	100.5	114.1
September	114.2	113.3	123.7	118.2	121.4	118.2	120.8	103.3	118.0
December	118.1	115.5	127.8	121.5	123.5	123.5	132.5	105.7	121.9
1983: March	121.1	116.8	129.9	123.5	127.2	124.8	141.1	109.3	125.0
June	124.9	119.4	130.6	125.0	126.8	126.9	142.0	111.0	126.6
September	126.9	119.5	132.4	128.8	132.4	128.7	143.3	112.6	129.3
December	128.3	122.2	135.8	130.4	137.6	134.4	144.4	112.8	132.0

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number. (b) Base: March quarter 1982 = 100.0.

Six State Capital Cities, Canberra, and Darwin

Up to September quarter 1976, a common pattern of consumption was used as the basis of weighting in most fields to derive the Consumer Price Index for each State Capital City. Local weights were used for some important items and details are described in the 1976 and previous issues of the *Year Book*. Following the September quarter 1976 link in the index separate weighting patterns have been used for each State Capital City, Canberra, and Darwin (from September quarter 1980). The resultant indexes show price variations for each City on a basis particularly appropriate to that City. As the base of the index for each City is 1980-81 = 100.0,

the indexes may be used to draw comparisons between Cities as to differences in the degree of price movement from period to period, but not as to differences in price level.

Consumer Price Index numbers, all groups, for each Capital City are shown in the next table.

CONSUMER PRICE INDEX (a), ALL GROUPS, EIGHT CAPITAL CITIES
(Base of Each Index: 1980-81 = 100.0)

Period	Six State Capital Cities (b)	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra	Darwin	Eight Capital Cities (b)
Year										
1977-78	76.7	75.8	77.0	77.1	77.5	77.8	77.1	76.1	n.a.	n.a.
1978-79	83.0	82.4	83.1	83.4	83.2	84.1	83.1	82.3	n.a.	n.a.
1979-80	91.4	91.1	91.4	91.5	91.6	91.9	91.6	91.1	n.a.	n.a.
1980-81	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981-82	110.4	110.2	110.4	110.7	110.5	111.2	110.0	110.7	111.1	110.4
1982-83	123.1	123.4	122.8	122.9	123.5	122.5	121.8	124.0	123.1	123.1
Quarter ended										
1982: September	118.5	118.7	118.3	118.0	118.6	118.6	116.9	118.7	118.8	118.5
December	121.9	122.4	121.3	121.9	121.8	121.8	121.0	123.3	122.1	122.0
1983: March	124.6	125.1	124.0	125.0	125.2	123.7	123.5	125.9	124.6	124.7
June	127.3	127.4	127.4	126.6	128.5	125.9	125.9	128.0	126.9	127.3
September	129.5	129.2	129.5	129.3	130.3	129.4	127.5	129.8	128.6	129.4
December	132.5	131.8	133.3	132.0	132.9	132.3	130.4	133.0	130.3	132.5

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number. (b) Weighted average.

Long-term Price Movements

The Consumer Price Index numbers shown in the preceding tables are available only since 1948-49. An attempt has therefore been made to compile, as shown in the next table, a long-term Six State Capital Cities retail price index by linking a number of indexes, but as these differ greatly in scope they give only a broad indication of long-term trends in retail price levels.

RETAIL PRICE INDEX NUMBERS, STATE CAPITAL CITIES
(Base: 1911 = 100)

Year	Six State Capital Cities (a)	Year	Six State Capital Cities (a)	Year	Six State Capital Cities (a)	Year	Six State Capital Cities (a)
1901	88	1922 (b) ..	162	1943	188	1964	483
1902	93	1923	166	1944	187	1965	502
1903	91	1924	164	1945	187	1966	517
1904	86	1925	165	1946	190	1967	534
1905	90	1926	168	1947	198	1968	548
1906	90	1927	166	1948	218	1969	564
1907	90	1928	167	1949	240	1970	586
1908	95	1929	171	1950	262	1971	621
1909	95	1930	162	1951	313	1972	658
1910	97	1931	145	1952	367	1973	720
1911	100	1932	138	1953	383	1974	829
1912	110	1933	133	1954	386	1975	954
1913	110	1934	136	1955	394	1976	1,083
1914 (b) ..	114	1935	138	1956	419	1977	1,216
1915 (b) ..	130	1936	141	1957	429	1978	1,313
1916 (b) ..	132	1937	145	1958	435	1979	1,432
1917 (b) ..	141	1938	149	1959	443	1980	1,578
1918 (b) ..	150	1939	153	1960	459	1981	1,731
1919 (b) ..	170	1940	159	1961	471	1982	1,923
1920 (b) ..	193	1941	167	1962	469	1983	2,117
1921 (b) ..	168	1942	181	1963	472		

(a) Weighted average.

(b) Month of November only.

The successive indexes used were as follows: from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946-47, the 'C' Series Retail Price Index; from 1946-47 to 1948-49, a composite of the Consumer Price Index Housing Group (partly estimated) and the 'C' Series Index excluding rent; and, from 1948-49, the Consumer Price Index.

While a similar index has not been compiled for each State Capital City separately, available information indicates that the trend of prices in Brisbane over the same period would not have differed substantially from the trend indicated in the table.

In 1983, prices were over 11 times as great as they were in 1945. The 1945 level was a little over twice that of 1901.

Indexes of Retail Prices of Food in Queensland Towns

A special survey of retail prices of a range of food items in selected Queensland Cities and Towns is undertaken annually. Data obtained from these surveys are expressed as a series of price index numbers showing, for the field covered, comparative food price levels between the Towns on a base of Brisbane = 100 for each year. The indexes compare relative retail prices of food in various localities at each point in time. They do not show movement over time in each locality.

The weights used in combining the collected prices in the 1983 survey are derived from estimates of household consumption or expenditure for the weighted average of the eight Capital Cities in 1979-80. Information on the spending habits of Australian households in that year was obtained from a number of sources, the most important being the 1979-80 Retail Census and the 1979-80 Manufacturing Census. In earlier years the weights were based on estimates for the six State Capital Cities as reported in the 1974-75 Household Expenditure Survey.

No general pattern of relative levels of retail prices throughout the State is evident from the surveys. Grocery items are generally dearer relative to Brisbane, but this is offset to varying degrees by relatively cheaper meat prices in many centres. Moreover, for seasonal items such as meat, the degree of disparity from Brisbane tends to vary to a greater extent from year to year than is the case for the more stable grocery items.

The comparisons measure relative retail prices only for the field covered by the selected items as combined by a common set of weights. They cannot be considered as reflecting relative prices in other fields of expenditure. A common list of items or 'basket' such as this does not reflect differences in living costs which result from differences in modes of living, e.g. as reflected by climate and availability of items etc., or levels of living between localities. The degree of appropriateness of the items and weights used would vary from centre to centre, and therefore the differences in price levels as indicated by the indexes should be regarded as approximations only.

In some instances, the relationships between Towns in the survey month of one year may differ significantly from those existing between them at another date during the same year or in other years, because seasonal influences on prices of some items, e.g. potatoes and meat, may occur at different times in different localities. In these circumstances it is desirable to study the run of index numbers for a number of years.

Although personal visits were made to collect prices in some Towns, the majority of the indexes were compiled from information obtained from postal collections. In those Towns where prices have been collected by personal visit, it has been possible to undertake investigations into items which have sometimes proved troublesome in postal collections, in particular meat, milk, and bread. Index numbers for Towns which have been visited are therefore considered to be more reliable indicators of relative food price levels than those

compiled for other years for the same Towns. In some of the smaller centres the determination of accurate price levels has been further complicated by the limited number of retail outlets.

The following table shows indexes of retail prices of food in Queensland Cities and Towns for six years.

INDEX NUMBERS OF RELATIVE RETAIL PRICES OF FOOD ITEMS (a)
(Base: Brisbane = 100 at Each Point in Time)

City or Town	At March					At May
	1978	1979	1980	1981	1982	1983
Brisbane	(b) 100	(b) 100	(b) 100	(b) 100	(b) 100	(b) 100
Ayr	109	106	(b) 106	107	106	111
Biloela	100	105	108	112	111	114
Blackall	n.a.	n.a.	n.a.	n.a.	n.a.	115
Blackwater	103	109	109	(b) 109	107	109
Bowen	111	110	(b) 107	106	107	110
Bundaberg	101	101	100	101	100	98
Cairns	103	103	104	103	103	102
Caloundra	101	(b) 99	101	101	99	(c) 99
Charleville	107	107	109	109	108	111
Charters Towers	106	105	105	108	108	112
Chinchilla	102	100	101	103	102	(b) 107
Clermont	110	110	113	(b) 113	110	115
Cloncurry	115	109	111	113	114	117
Collinsville	111	110	(b) 108	111	108	114
Cooktown	123	115	121	123	124	127
Cunnamulla	110	107	109	110	113	115
Dalby	99	97	97	(b) 97	99	101
Emerald	107	109	105	(b) 106	105	110
Gayndah	102	100	101	104	104	104
Gladstone	103	103	103	(b) 103	101	103
Gold Coast	100	(b) 100	99	100	99	102
Goondiwindi	107	104	103	106	103	107
Gympie	103	103	102	102	102	103
Hughenden	112	109	111	112	112	115
Ingham	107	104	(b) 109	108	108	112
Innisfail	104	104	104	107	105	105
Kingaroy	102	103	101	(b) 97	98	100
Longreach	111	109	110	(b) 114	113	117
Mackay	101	103	(b) 102	103	102	104
Mareeba	107	107	105	108	104	107
Maryborough	104	102	104	102	102	102
Monto	103	100	99	102	103	104
Moranbah	n.a.	n.a.	n.a.	n.a.	n.a.	117
Mount Isa	114	115	112	114	114	111
Mount Morgan	103	104	107	(b) 106	105	107
Moura	104	101	103	106	105	105
Nambour	101	(b) 98	100	98	99	102
Proserpine	113	117	(b) 110	111	113	114
Richmond	109	108	108	109	112	118
Rockhampton	100	102	104	(b) 101	101	103
Roma	103	103	104	104	111	109
St George	109	108	105	107	107	108
Sarina	107	108	(b) 108	108	109	113
Stanthorpe	102	101	102	(b) 100	101	105
Thursday Island	136	140	141	137	140	149
Toowoomba	100	100	101	(b) 99	98	100
Townsville	103	104	(b) 104	103	103	106
Tully	107	106	109	111	107	111
Warwick	95	96	96	(b) 98	99	100
Weipa	125	123	125	126	122	119
Winton	113	113	116	118	115	121

(a) These indexes compare relative retail prices of food in various localities at each point in time. They do not show movement over time in each locality. (b) Personal collection. (c) Sunshine Coast.

3 RETAIL PRICES

The next table shows the average retail prices of selected items as recorded for Consumer Price Index purposes. The prices are published as *approximate* indicators of price levels and do not purport to be the actual averages of all sales in Brisbane.

AVERAGE RETAIL PRICES OF SELECTED ITEMS, BRISBANE
(cents)

Item	Unit	1978	1979	1980	1981	1982 (a)	1983
<i>Dairy produce</i>							
Milk, bottled, delivered	2 x 600 ml ..	51	54	60	68	76	83
Cheese, processed	250 g packet ..	54	58	65	(b) 142	(b) 160	(c)(d) 207
Butter	500 g ..	92	96	107	122	143	154
<i>Cereal products</i>							
Bread, milk loaf, sliced, supermarket sales	680 g ..	46	48	57	65	77	81
Biscuits, dry	225 g packet ..	38	40	(c) 44	(e) 54	(e) 63	(e) 65
Breakfast cereal, corn-based	500 g packet ..	70	70	79	90	102	110
Flour, self-raising	1 kg packet ..	40	41	46	51	57	(c)(f) 115
Rice, short grain	500 g packet ..	37	38	37	41	45	(c)(g) 77
<i>Meat and seafoods</i>							
<i>Beef</i>							
Rib, without bone	1 kg ..	204	336	384	391	396	424
Rump steak	1 kg ..	319	501	588	595	638	710
T-bone steak, with fillet	1 kg ..	310	465	539	556	606	643
Chuck steak	1 kg ..	192	332	392	397	414	462
Silverside, corned	1 kg ..	213	350	400	414	427	455
Sausages	1 kg ..	129	202	239	259	281	297
<i>Lamb</i>							
Leg	1 kg ..	287	372	413	412	429	452
Loin chops	1 kg ..	296	387	429	436	457	488
Forequarter chops	1 kg ..	262	365	398	405	417	451
<i>Pork</i>							
Leg	1 kg ..	303	409	424	438	473	482
Loin chops	1 kg ..	305	402	414	433	478	533
Chicken, frozen	1 kg ..	188	198	213	236	253	245
Bacon, middle rashers	250 g packet ..	111	141	152	167	188	186
Beef, corned	340 g can ..	94	114	154	157	158	173
Salmon, pink	220 g can ..	95	100	119	124	125	120
<i>Fresh fruit and vegetables</i>							
Oranges	1 kg ..	59	61	67	68	85	86
Bananas	1 kg ..	81	64	82	89	82	90
Potatoes	1 kg ..	34	38	47	65	47	74
Tomatoes	1 kg ..	126	83	121	150	121	176
Carrots	1 kg ..	78	63	79	95	74	102
Onions	1 kg ..	43	49	49	120	62	79
<i>Processed fruit and vegetables</i>							
Peaches	825 g can ..	64	70	72	81	88	97
Pineapple, sliced	450 g can ..	40	42	44	49	53	55
Peas, frozen	500 g packet ..	57	58	60	72	84	93
<i>Confectionery</i>							
Chocolate, milk, block	200 g ..	79	82	99	102	117	128
<i>Other food</i>							
Eggs	55 g dozen ..	113	118	132	148	155	163
Sugar, white	2 kg packet ..	64	79	87	91	101	113
Jam, strawberry	500 g jar ..	79	86	101	111	119	131
Tea	250 g packet ..	79	73	73	73	76	95
Coffee, instant	150 g jar ..	297	266	304	286	290	314
Tomato sauce	300 ml bottle ..	40	42	46	(h) 80	(h) 88	(h) 93
Margarine, poly-unsaturated	500 g pack ..	80	86	93	102	102	101
Baked beans, in tomato sauce	440 g can ..	(i) 35	(i) 38	(c) 39	45	50	54
Baby food	125 g can ..	18	19	22	24	26	28
<i>Alcoholic beverages</i>							
Beer, chilled	740 ml bottle ..	85	92	97	(j) 104	(j) 116	(j) 129

(a) Some changes in pricing basis occurred from June quarter 1982. Refer to paragraph 4 of the Explanatory Notes in the ABS publication, Catalogue No. 6403.0, for the June quarter 1982 for more details. (b) 500 g. (c) Average for less than 12 months. (d) Sliced, wrapped, 500 g. (e) 250 g. (f) 2 kg. (g) Medium grain, 1 kg. (h) 600 ml. (i) 450 g. (j) 750 ml.

4 WHOLESALE PRICES OF FARM PRODUCTS AND MEAT

Statistical records of the wholesale prices of livestock, meat, and produce in the Brisbane markets are compiled regularly.

Livestock

The next table shows the average prices in Brisbane over six years for the main classes of livestock. Prices have been calculated from records of sales held at Cannon Hill saleyards.

AVERAGE WHOLESALE PRICES OF LIVESTOCK, BRISBANE
(\$)

Class of stock	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Bullocks and steers	113.39	259.59	329.45	320.81	291.51	334.35
Cows and heifers	70.62	187.18	224.85	206.04	193.45	216.59
Vealers, yearlings, and calves	23.57	70.39	82.80	80.82	70.97	61.07
Sheep	8.68	13.96	14.25	14.26	14.64	9.61
Lambs	15.06	18.76	22.75	22.09	23.61	19.92
Pigs	49.51	63.28	69.18	70.07	81.57	79.59

Fruit and Vegetables

The next table shows average wholesale prices of Queensland fruit and vegetables in Brisbane over six years. These averages are based on Department of Primary Industries' records of prices realised at the Brisbane Markets.

AVERAGE WHOLESALE PRICES OF QUEENSLAND FRUIT AND VEGETABLES, BRISBANE
(\$)

Commodity	Unit	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Fruit</i>							
<i>Apples</i>							
Delicious	kg	0.48	0.35	0.51	0.64	0.44	0.59
Granny Smith	kg	0.34	0.39	0.37	0.45	0.39	0.45
Other	kg	0.38	0.35	0.43	0.43	0.42	0.52
Bananas (a)	kg	0.44	0.37	0.34	0.43	0.41	0.43
Grapes	kg	0.73	0.71	0.81	1.04	1.01	0.85
Lemons	kg	0.41	0.35	0.43	0.39	0.50	0.61
Mandarins	kg	0.35	0.46	0.45	0.47	0.54	0.50
Mangoes	kg	0.64	1.14	0.92	0.79	1.37	1.18
<i>Oranges</i>							
Navel	kg	0.32	0.32	0.35	0.33	0.35	0.37
Valencia	kg	0.26	0.26	0.29	0.29	0.30	0.38
Papaws	kg	0.75	0.68	0.67	0.73	0.77	0.72
Passion-fruit	kg	0.94	1.05	0.99	0.87	1.06	1.23
Peaches	kg	0.61	0.71	0.79	0.74	0.62	0.81
Pears	kg	0.29	0.29	0.33	0.32	0.48	0.58
Pineapples, smoothleaf	tonne	212.07	195.93	196.17	179.96	201.91	347.39
Plums	kg	0.83	0.87	0.66	1.28	0.77	0.97
Strawberries	kg	2.40	3.20	3.52	2.68	3.24	3.51
<i>Vegetables</i>							
Beans, green	kg	0.63	0.56	0.78	0.92	0.86	1.00
Cabbages (b)	tonne	203.96	102.02	190.43	264.76	229.06	116.22
Capsicums	kg	0.93	0.67	0.97	0.98	1.00	0.90
Carrots	kg	0.25	0.33	0.31	0.28	0.43	0.33
Cauliflowers	tonne	276.72	224.47	253.55	249.14	237.02	341.97
Celery	kg	0.42	0.43	0.37	0.49	0.43	0.47
Cucumbers, green	kg	0.32	0.35	0.33	0.42	0.39	0.43
Lettuce	kg	0.38	0.33	0.44	0.53	0.59	0.46
Onions	tonne	207.37	207.38	218.34	367.02	580.25	281.56
Peas, green	kg	0.70	0.66	0.81	1.00	0.85	1.10
Potatoes	tonne	124.96	203.50	157.43	247.93	259.69	238.79
Pumpkins	tonne	79.48	143.71	155.75	184.18	189.10	209.17
Tomatoes	kg	0.59	0.53	0.60	0.71	0.68	0.87

(a) Ripe Cavendish, hands in cartons.

(b) Excluding sugarloaf.

5 WHOLESALE PRICE INDEXES

In the following section details are given of those wholesale price indexes which are currently published by the Bureau. For details relating to overseas export and import price indexes see Chapter 19, External Trade, Sections 7 and 8.

Building Materials, including Electrical Installation Materials

Wholesale price index numbers for building materials are compiled separately for (i) house building and (ii) buildings other than houses and 'low-rise' flats (those up to three storeys).

The indexes measure changes in prices of selected materials in accordance with their usage in actual building projects selected as representative for the purpose. Prices are collected monthly, generally on a 'delivered on site' basis, from representative suppliers of building materials, for specified standards of each commodity. As far as possible, actual transaction prices are used in the index as distinct from *list* prices.

The index of materials used in house building relates to house types for which brick, brick-veneer, timber, or fibre-cement sheeting have been used as the principal materials for the outer walls. The items and weights were derived from reported values of each material used in houses constructed in or about 1968-69 in each State Capital City. Each Capital has its own weighting pattern and selection of materials based on local usage.

The next table shows, for Brisbane, details of the 10 group indexes and the combined all groups index for six years.

WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN HOUSE BUILDING: GROUP INDEXES, BRISBANE
(Base of Each Group Index: 1966-67 = 100.0)

Group	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Concrete mix, cement, and sand ..	229.2	252.6	291.6	329.9	369.2	440.1
Cement products	266.3	288.7	319.8	362.8	407.4	451.4
Clay bricks, tiles, etc.	244.1	261.8	299.9	346.1	398.9	444.5
Timber, board, and joinery	325.5	340.5	378.0	443.2	495.4	532.5
Steel products	282.4	299.7	329.6	377.7	425.8	482.3
Other metal products	236.8	250.1	287.1	327.9	359.2	386.9
Plumbing fixtures etc.	234.2	236.7	270.2	311.8	339.8	366.0
Electrical installation materials ..	219.2	245.7	287.8	325.2	359.9	420.8
Installed appliances	158.3	164.2	181.6	211.1	236.4	263.4
Other materials (b)	n.a.	n.a.	n.a.	265.7	297.5	335.2
All groups	265.1	281.3	315.0	363.7	407.2	448.0

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number.

(b) This series is a combination of the two series formerly published as Plaster and plaster products and Miscellaneous materials.

All groups index numbers for each State Capital City and their weighted averages are shown in the next table.

WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN HOUSE BUILDING:
ALL GROUPS INDEXES, STATE CAPITAL CITIES
(Base of Index for Each City and Six State Capitals: 1966-67 = 100.0)

Year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Six State Capital Cities (b)
1977-78	254.0	238.6	265.1	270.7	253.4	256.7	252.0
1978-79	272.7	251.4	281.3	292.1	268.2	273.6	268.1
1979-80	309.5	283.4	315.0	338.5	299.4	304.2	302.9
1980-81	347.6	324.7	363.7	386.1	337.6	338.2	344.0
1981-82	378.5	355.5	407.2	427.2	373.2	371.7	377.9
1982-83	410.3	394.9	448.0	480.3	409.3	406.5	415.7

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number.

(b) Weighted average.

The separate City indexes measure price movements within each Capital City individually. They enable comparisons to be drawn between capitals as to differences in degree of price movement from period to period, but not as to differences in price level.

In 1981, a revised Price Index of Materials Used in Building Other Than House Building was introduced on a reference base 1979-80 = 100.0 for the six State Capital Cities. The revised index replaced the previous index which had a reference base of 1966-67 = 100.0. A description of the previous index is contained in the 1981 and earlier issues of the *Year Book*.

Types of buildings directly represented in the revised price index of materials used in building other than house building include flats, hotels, motels, shops, factories, offices and other business premises, education and health buildings, and other non-residential buildings. The index is a fixed weights index and includes 68 items. The items were selected and allocated weights in accordance with the estimated average values of materials used in the construction of buildings, other than houses, commenced in the six State Capital Cities in the three years ended June 1977. The same weighting pattern is used for all State Capital Cities and is applied to local price measures in calculating index numbers for each State Capital City. In addition to an all groups index number for each State Capital City, indexes are published for selected major materials and special combinations of materials. The revised index also includes index numbers for Electrical Installation Materials which replace the series previously constructed separately.

Details of the Wholesale Price Index of Materials Used in Building Other Than House Building are given in the next table.

WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN BUILDING
OTHER THAN HOUSE BUILDING, BRISBANE
(Base of Each Index: 1979-80 = 100.0)

Group	1980-81	1981-82	1982-83
Selected major building materials			
Structural timber	116.7	129.1	137.8
Clay bricks	114.9	130.0	142.4
Ready-mixed concrete	110.8	120.9	143.8
Precast concrete products	112.0	125.7	147.3
Galvanised steel decking, cladding, etc.	114.1	130.8	148.7
Structural steel	115.6	133.4	146.3
Reinforcing steel bar, fabric, and mesh	113.5	125.1	139.6
Aluminium windows	116.0	125.5	133.9
Steel windows, doors, louvres, etc.	114.3	126.6	138.9
Builders' hardware	113.5	127.8	147.6
Sand, aggregate, and filling	123.6	146.3	181.6
Carpet	113.7	126.2	130.4
Paint	121.4	132.6	152.9
Non-ferrous pipes	99.7	97.8	103.3
Special combinations of building materials			
All electrical materials (b)	109.4	121.7	139.2
All mechanical services	110.6	123.4	139.6
Plumbing materials	110.6	122.6	138.5
All groups, excluding electrical materials and mechanical services	114.2	127.4	143.0
All groups	113.2	126.3	142.2

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number. (b) See text above.

All groups index numbers for each State Capital City and their weighted averages are shown in the next table.

WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING:
ALL GROUPS INDEXES, STATE CAPITAL CITIES AND DARWIN
 (Base of Index for Each City and Six State Capitals: 1979-80 = 100.0; and Darwin: 1981-82 = 100.0)

Year	Six State Capital Cities (b)	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin
1979-80	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.
1980-81	112.9	113.1	112.7	113.2	113.8	112.2	111.6	n.a.
1981-82	125.4	126.6	123.6	126.3	127.4	123.8	122.9	100.0
1982-83	140.4	142.1	136.7	142.2	144.5	139.1	136.3	111.3

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number. (b) Weighted average.

The separate City indexes measure price movements within each Capital City individually. They enable comparisons to be drawn between Capital Cities as to differences in degree of price movement from period to period, but not as to differences in price level.

In 1982 the Price Index of Materials Used in Building Other Than House Building was extended to include Darwin, on a reference base 1981-82 = 100.0. The weighting patterns for the Darwin index are based on the same information used to construct the weighting patterns for the other Capital Cities, but adjusted to account for differences in material usage and price levels between Darwin and the other Cities.

Metallic Materials

Two sets of price measures relating to important metallic materials used in selected activities of manufacturing industry have been developed. The first of these measures is the Price Index of Metallic Materials Used in the Manufacture of Fabricated Metal Products. This index includes important metallic materials selected and combined in accordance with a weighting pattern reflecting value of usage as reported at the 1968-69 Census of Manufacturing Establishments for establishments classified to the Fabricated Metal Products Sub-division of Manufacturing Industry. Index numbers for the groups for six years are shown in the next table.

WHOLESALE PRICE INDEX (a) OF METALLIC MATERIALS USED IN THE MANUFACTURE OF FABRICATED METAL PRODUCTS: GROUP (b) INDEXES, AUSTRALIA
 (Base of Each Group Index: 1968-69 = 100.0)

Year	Iron and steel	Aluminium	Copper and brass	Zinc	Silver	All groups
1977-78	248.9	193.7	153.9	237.9	246.8	238.5
1978-79	264.9	208.9	179.2	291.3	327.4	256.2
1979-80	294.4	251.5	216.6	329.5	957.3	297.6
1980-81	336.0	281.5	209.9	332.4	719.7	330.4
1981-82	370.2	291.2	210.0	373.8	406.3	354.7
1982-83	407.7	312.2	231.1	400.3	624.6	392.8

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number. (b) A new group structure was retrospectively adopted from January 1980.

The second series is the Price Indexes of Copper Materials Used in the Manufacture of Electrical Equipment. Four copper materials (busbar, paper covered strip, polyvinyl chloride cable, and enamelled winding wire) have been combined into five separate indexes in accordance with weighting patterns which reflect value of usage in each of five selected activities of the Electrical Machinery, Equipment, and Supplies Class of Manufacturing Industry, and these are shown in the next table.

**WHOLESALE PRICE INDEXES (a) OF COPPER MATERIALS USED IN THE MANUFACTURE OF
ELECTRICAL EQUIPMENT: INDEX NUMBERS FOR SELECTED ACTIVITIES, AUSTRALIA**
(Base of Each Group Index: 1968-69 = 100.0)

Year	Copper materials used in the manufacture of				
	Electric motors and motor control equipment	High voltage and low voltage switch-gear	Distribution transformers	Power transformers	General transformers
1977-78	153.1	163.0	140.0	138.9	148.0
1978-79	173.9	194.6	159.1	167.3	169.3
1979-80	204.6	236.9	185.1	205.4	197.8
1980-81	202.8	230.7	177.4	199.7	189.6
1981-82	210.8	232.6	177.1	194.1	191.0
1982-83	241.2	261.8	196.6	216.1	212.5

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number.

The price series used are obtained monthly from major Australian manufacturers of the relevant basic materials and the prices collected are, as far as possible, those normally charged to representative manufacturers for goods delivered into their stores.

Materials Used in Manufacturing Industry

The composition of this index is based on materials used by establishments classified to Division C, Manufacturing, of the Australian Standard Industrial Classification (ASIC). The index is on a *net basis*, i.e. it relates in concept only to those materials which are used by establishments within the Manufacturing Division in Australia and which have been produced by establishments outside that Division. Such outside establishments are either Australian establishments classified to other Divisions of Australian industry, e.g. Mining or Agriculture, or are overseas establishments, including overseas manufacturing establishments. In keeping with the scope and net basis of the index, each material is only priced at the stage it *first* enters manufacturing. Thus the pricing and weights for the index reflect usage of materials at the point of entry to the Manufacturing Division.

**WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN MANUFACTURING INDUSTRY: GROUP INDEXES,
AUSTRALIA**
(Base of Each Group Index: 1968-69 = 100.0)

Group	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
INDUSTRY OF ORIGIN CLASSIFICATION (ASIC)						
Imported materials						
Agriculture	303.4	285.3	329.2	293.6	264.5	303.6
Mining	515.3	542.6	911.8	1,146.3	1,247.8	1,318.7
Manufacturing	201.6	222.1	261.8	278.7	290.6	310.6
Total	257.0	275.7	366.4	413.0	435.7	464.9
Home produced materials						
Agriculture	162.4	228.8	280.3	295.9	r 282.0	288.8
Forestry and fishing	273.5	263.5	300.3	344.4	363.0	378.8
Mining	211.4	281.8	403.5	454.1	r 472.1	541.1
Electricity	160.9	173.8	186.7	210.2	253.3	333.9
Total	176.7	238.7	305.2	330.9	r 330.3	359.3
All groups	198.5	248.8	321.8	353.2	r 358.9	388.0

**WHOLESALE PRICE INDEX (a) OF MATERIALS USED IN MANUFACTURING INDUSTRY: GROUP INDEXES,
AUSTRALIA—continued**
(Base of Each Group Index: 1968-69 = 100.0)

Group	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
COMMODITY BASED CLASSIFICATION (SITC)						
Manufactured materials (imported)						
Chemicals	170.7	180.9	225.1	244.7	252.8	271.0
Metal manufactures, components for transport equipment and machinery	246.6	271.6	294.2	310.3	320.7	343.9
Other manufactured materials	185.1	201.3	230.3	242.9	257.3	280.8
Other materials (imported and home produced)						
Food, live animals, and tobacco	166.6	232.5	285.1	299.5	283.9	291.2
Crude materials (excluding fuels)	199.2	227.4	288.8	286.9	r 281.4	303.9
Electricity, gas, and fuels	291.0	362.4	554.6	695.5	771.8	880.7
All groups	198.5	248.8	321.8	353.2	r 358.9	388.0

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number.

The selected items were allocated weights in accordance with estimated manufacturing usage in the year 1971-72. They have been combined into broad index groups using two different classifications, viz. the Australian Standard Industrial Classification (ASIC) and the Standard International Trade Classification (SITC). This allows the presentation of two series, one on an industry of origin basis (ASIC) and the other on a commodity basis (SITC).

Prices are collected monthly, from principal users and, in some cases, from major suppliers, on a delivered into store basis where possible, to approximate closely the conceptual framework of the index. Particular problems arise in dealing with transfers within vertically integrated enterprises. These do not take place on the open market and therefore there is usually no transaction price. In such instances various methods of imputing movements in market prices have been adopted, including the use of movements in actual extraction costs, opportunity cost, etc. Index numbers in two series, one on an industry of origin basis and the other on a commodity basis, are shown in the above table.

Articles Produced by Manufacturing Industry

These indexes relate to articles produced in defined 'sectors' of Australian manufacturing industry for sale or transfer to other sectors, for export, or for use as capital equipment. Articles sold or transferred to other establishments within the sector for further processing are excluded. Capital equipment produced is within the scope of the index, however, even if sold or transferred to other manufacturing establishments in the sector.

The items included in these indexes were selected on the basis of values of articles produced in 1971-72. The selection was made from data reported in the 1971-72 Census of Manufacturing Establishments. Prices are collected mainly at the mid-point of each month, mostly from principal manufacturers of the goods concerned, and relate to selling prices exclusive of excise and sales tax. Special inquiry is made in regard to handling and distribution costs and to discount arrangements.

Separate indexes are published for the manufacturing division as a whole and for selected sub-divisions. The all manufacturing industry index measures price movements of articles at the point of exit from the manufacturing division. The sub-division indexes reflect movements in prices of articles produced primarily by the respective sub-divisions for sale or transfer outside the manufacturing division, or to other sub-divisions within manufacturing, or for use as capital equipment.

The following table shows net index numbers for six years for all manufacturing industry and for each of the 12 sub-divisions within the manufacturing division.

WHOLESALE PRICE INDEXES (a) OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY, AUSTRALIA
(Base of Each Group Index: 1968-69 = 100.0)

Group	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Net sub-division indexes						
Food, beverages, and tobacco	195.6	226.4	266.5	290.9	301.9	328.2
Textiles	193.3	205.1	228.8	252.7	270.6	286.7
Clothing and footwear	225.2	238.4	255.3	276.5	298.1	316.0
Wood, wood products, and furniture	264.0	280.4	315.5	357.3	388.4	425.5
Paper, paper products, and printing	231.7	245.0	269.6	304.2	346.0	390.4
Chemical, petroleum, and coal products	200.7	233.1	307.4	r 366.8	r 400.9	442.4
Glass, clay, and other non-metallic mineral products	219.8	236.8	265.2	300.2	337.5	383.3
Basic metal products	214.0	237.2	282.7	297.8	315.3	345.5
Fabricated metal products	268.7	287.7	323.9	371.6	414.2	452.5
Transport equipment	211.6	230.2	252.2	275.7	303.2	335.4
Other industrial machinery and equipment and household appliances	215.3	232.2	261.3	289.7	320.7	353.3
Miscellaneous manufacturing industry products	192.4	209.8	252.5	273.9	289.5	313.4
All manufacturing industry index	213.8	237.4	274.9	r 305.3	r 328.9	360.3

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off an index number to the nearest whole number.

6 PRICE CONTROL, CONSUMER AFFAIRS

Price Control

For a brief history of price control in Queensland since 1920 reference should be made to the 1977 and earlier editions of the *Year Book*. At October 1982, no item was controlled by the Prices Commissioner although legislation (*The Profiteering Prevention Acts, 1948 to 1959*) still existed which would allow controls to be re-imposed at any time. Appropriate authorities, however, have control over gas, electricity, milk, and bread in accordance with the provisions of Acts specifically concerned with the determination of retail prices of these commodities.

Petroleum Products Pricing Authority

The Petroleum Products Pricing Authority was established on 26 June 1981 pursuant to the Commonwealth *Petroleum Products Pricing Act 1981*. The functions of the Authority are to conduct inquiries in relation to prices for the supply of petroleum products or related services, and to report to the Minister for Administrative Services the results of every such inquiry.

An inquiry may be either: (i) a prices justification inquiry, that is an inquiry as to whether the price or prices at which a company or companies supplies or supply, or proposes or propose to supply, products or services of a particular description is or are justified; or (ii) an inquiry into such specified matter or matters relating to the prices at which products or services are supplied as is required by the Minister.

Those companies that are declared by the Minister in the *Commonwealth of Australia Gazette* are required by Section 19 of the Petroleum Products Pricing Act to notify the Authority of proposed increases in the prices of defined petroleum products and associated services. Where a proposed increase is to be the subject of an inquiry, an interim price increase may be allowed by the Authority pending the outcome of such an inquiry.

Consumer Affairs

Under the Queensland *Consumer Affairs Act 1970-1983*, a Consumer Affairs Bureau was established to advise and assist consumers, to receive and investigate complaints, and to initiate or authorise prosecutions for false advertising or misrepresentation of facts about goods or



EDUCATION—*Chapter 8*
Photo Australian Information Service

Jacaranda trees in bloom. University of Queensland

A winter sunset blaze, Brisbane

TOURISM—*Chapter 24*
Photo Sharvo K. Marken





RETAIL TRADE—Chapter 24

Photo: Department of Commercial and Industrial Development

Celebrations in Townsville Shopping Mall

Pioneer Valley from Sky Window Lookout, Eungella National Park

TOURISM—Chapter 24

Photo: Shuryn K. Marken



services offered for sale to consumers. The Act also created a Consumer Affairs Council to watch over the interests of consumers and traders, and to make recommendations to the government for appropriate legislation etc. The Act gives the Consumer Affairs Bureau certain powers to safeguard the interests of consumers.

Federal Trade Practices and Consumer Protection Legislation

The Commonwealth *Trade Practices Act* 1974 prohibits certain anti-competitive conduct such as agreements affecting competition (including price fixing and boycotts), monopolisation, resale price maintenance, exclusive dealing, and price discrimination. In some cases, proposed mergers may also be prohibited. The Act also contains consumer protection provisions strengthening purchaser (including small business) rights in consumer contracts and prohibiting, under penalty, some unfair practices.

The Trade Practices Commission, which has responsibility for the overall administration of the Act, has three main functions:

- (a) compliance work: dealing with complaints concerning possible breaches of the Trade Practices Act (both in respect of restrictive trade practices and consumer protection) and in appropriate cases bringing proceedings in the Federal Court,
- (b) adjudication work: dealing with applications by businesses for exemption from the restrictive trade practices provisions of the Act, and
- (c) guidance of business and consumers in connection with their respective obligations and rights under the Act.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Indexes of Retail Prices of Food in Queensland Towns (6401.3) (*annual*)

Central Office Publications

Consumer Price Index (6401.0) (*quarterly*)

Average Retail Prices of Selected Items, Eight Capital Cities (6403.0) (*quarterly*)

Price Index of Materials Used in Building Other Than House Building (6407.0) (*monthly*)

Price Index of Materials Used in House Building (6408.0) (*monthly*)

Price Indexes of Metallic Materials (6410.0) (*monthly*)

Price Index of Materials Used in Manufacturing Industry (6411.0) (*monthly*)

Price Indexes of Articles Produced by Manufacturing Industry (6412.0) (*monthly*)

A Guide to the Consumer Price Index (6440.0) (*irregular*)

Chapter 22

PUBLIC FINANCE

1 INTRODUCTION

This chapter provides details of the financial transactions of public authorities in Queensland, namely the Queensland Government, Semi-government Authorities, and Local Authorities. A consolidation of the transactions of the three levels of public authorities is shown in Section 3. Details on associated topics such as Commonwealth and State Government financial relations, government indebtedness, taxation, and State financial institutions are also included.

2 COMMONWEALTH AND STATE FINANCIAL RELATIONS

Commonwealth Government payments to or for the States may be classified under two major headings, General Purpose Payments and Specific Purpose Payments, each of which may be further classified into those of a revenue nature and those of a capital nature, as shown in the diagram on the next page. Excluded from this classification are amounts paid directly to Local Authorities.

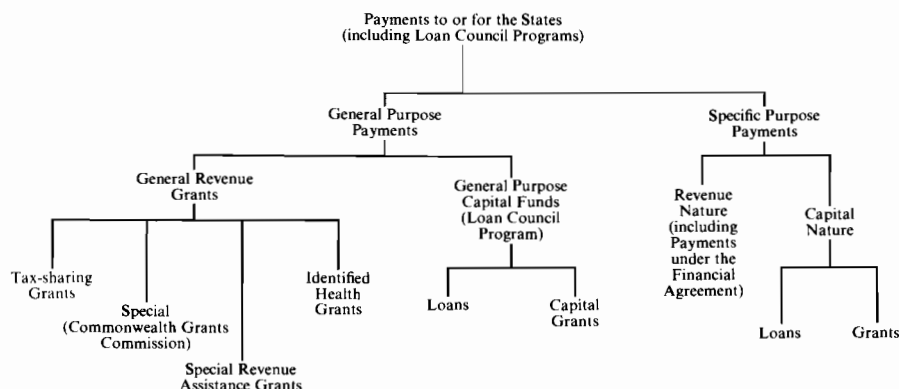
General Purpose Payments

General Revenue Grants

General Revenue Grants, the revenue component of General Purpose Payments, comprise Tax-sharing Grants, Special Grants (on recommendation of the Commonwealth Grants Commission), Identified Health Grants, and Special Revenue Assistance Grants.

Tax-sharing Grants—Tax-sharing arrangements between the Commonwealth Government and the States were introduced to provide general purpose financial assistance to the States and Local Authorities. When these arrangements commenced in 1976–77, the Commonwealth Government continued as the sole authority imposing taxes on income but each year the States received a fixed percentage of the personal income tax collections, excluding the effects of any special surcharges or rebates made under Commonwealth Government legislation. The right, not yet exercised by Queensland, exists for each State to impose a surcharge or grant a rebate on personal income tax in its territory, additional to that imposed by the Commonwealth Government.

Because of fluctuations in the estimates of total tax-sharing entitlements during 1976–77 caused by changes in estimates of tax collections, the October 1977 Premiers' Conference agreed to adopt the preceding year's net personal income tax collections as the base. These arrangements between the Commonwealth and the States provided that tax-sharing arrangements as a whole would be reviewed before the end of 1980–81. Accordingly a special Premiers' Conference was convened on 4 May 1981, which was followed by a Conference of



Commonwealth and State Health Ministers, and modified arrangements for tax-sharing and health grants were subsequently incorporated in the *States (Tax Sharing and Health Grants) Act 1981*.

The guarantee, which existed under previous arrangements, that the grant payable to each State in any year would not be less, in absolute terms, than in the previous year, was retained.

The main new features of tax-sharing arrangements are:

- (a) The base for tax sharing is total Commonwealth taxation collections instead of the former net personal income tax collections, after a transitional year in 1981–82.
- (b) An additional amount is to be added to the tax-sharing grants in lieu of certain specific purpose grants which are to be terminated.
- (c) New, identifiable, general purpose health grants are to replace the former hospital cost-sharing assistance and certain other specific payments for health purposes.

In accordance with the *Local Government (Personal Income Tax Sharing) Act 1976*, the States also receive a specified proportion of personal income tax collections for distribution to Local Authorities. (For further details see Section 7, Local Government.)

As part of the mandatory review of the tax-sharing arrangements, the Commonwealth Grants Commission conducted an extensive inquiry into tax-sharing relativities and presented a report on 9 June 1981. In the light of subsequent submissions by the States and the Commonwealth, a second report was presented on 31 May 1982. Both reports recommended a change in the factors governing distribution in favour of the more populous States.

At a Premiers' Conference on 20 June 1981, it was agreed that for 1981–82, tax-sharing grants would be divided according to the relativities prescribed in the *States (Tax Sharing and Health Grants) Act 1981*. The agreement also provided for additional grants to the more populous States, including \$29.5m to Queensland.

In the absence of agreement between the States following the Commission's second report, a Premiers' Conference in June 1982 adopted a Commonwealth proposal for distribution over the next three years. This proposal provided for modified factors to be phased in over the three years and guaranteed that each State's tax-sharing grant would increase by at least 2 per cent in real terms in 1982–83 and a further 1 per cent in each of the two subsequent years.

For 1981–82 and 1982–83 the grants were 20.72 per cent of the previous year's total tax collections. From 1981–82 the States' total share is to be divided into two tax-sharing pools. The 'basic' pool comprises 20.323 per cent of the relevant Commonwealth tax collections and is distributed according to the new per capita relativities. The 'supplementary' pool, which ensures

the guaranteed increase in real terms, is 0.397 per cent of such collections and any surplus in the pool is distributed among the States.

The amount received by Queensland under the tax-sharing arrangements in 1982–83 was \$1,527.4m. This was \$267.7m more than the \$1,259.7m received in 1981–82. In addition, a local government tax-sharing assistance payment of \$71.6m was paid to Queensland for distribution to Local Authorities.

Identified Health Grants—Following the report by the Jamison Committee of Inquiry into the efficiency and administration of hospitals, the Commonwealth Government announced that the hospital cost-sharing agreements with the States (other than South Australia and Tasmania) and the Northern Territory would not be renewed after they expired on 30 June 1981. These States are now paid one grant for health purposes in place of the separate cost-related grants previously made to them in respect of public hospitals, community health, and school dental services.

For 1981–82 and 1982–83 the amount of the grant was calculated by increasing the payments, based on the total health grants for 1980–81, by a factor to cover inflationary movements and subtracting from it, the Commonwealth's assessment of the amount of revenue which could be raised if charges, as specified in the regulations, were levied. The total health grant paid to Queensland in 1982–83 was \$93.0m.

Special Grants—Special grants have been paid to States on the recommendation of the Commonwealth Grants Commission since 1934–35. A condition of the Commonwealth's tax-sharing proposal, however, is that no special grants will be paid during the 'phase-in' period of 1982–83 to 1984–85. In previous years the Commission inquired into and reported upon any application made by a State for financial assistance for the purpose of making it possible for the State, by reasonable effort, to function at a standard not appreciably below the standard of other States.

In arriving at its recommendations the Commission each year compared the financial position of the claimant State(s) with standards derived from the experience of New South Wales and Victoria which were recognised by the Commission as the standard States.

Queensland has received special grants each year from 1971–72. In 1981–82 Queensland received an interim grant of \$25.0m in respect of 1980–81 and a completion grant of \$33.5m in respect of 1979–80. In 1982–83 the Commission recommended a completion grant of a negative amount of \$19.7m for Queensland in respect of 1980–81.

Special Revenue Assistance Grants

In addition to the above-mentioned grants, special assistance has been provided to all or some of the States to assist with budgeting problems. Queensland's last payment was \$10.5m in 1974–75. It is expected that \$31.0m will be paid to Queensland in 1983–84.

General Purpose Capital Funds (Commonwealth Loan Council Program)

The Loan Council, which was constituted under the Financial Agreement of 1927, is composed of representatives of the Commonwealth Government and of each State Government. To date the Loan Council has determined the amounts to be borrowed by all Governments, except for temporary and defence borrowings, together with the terms and conditions of the loans raised.

Until 30 June 1982 it also exercised control over the direct annual borrowings of all 'larger' local and semi-government authorities in Australia. For a trial period of three years, commencing in 1982–83, the amount, terms, and conditions of domestic borrowings by all electricity authorities in Australia are to be determined by the respective governments. In

November 1978 Loan Council agreement was obtained to a proposal that these larger authorities may borrow overseas direct for infrastructure financing to supplement the Loan Council borrowing program. In 1982–83 these larger authorities in Queensland, i.e. those borrowing more than \$1.5m in the year, borrowed \$829.6m which included \$583.0m for electricity authorities. The 'smaller' authorities borrowed \$141.7m in 1982–83.

Details of Queensland's State Government allocations under the Loan Council Program for each of the six years to 1982–83 are shown in the following table. The borrowing programs of local and semi-government authorities are not included in that table.

Subject to the decisions of the Loan Council, borrowings for and on behalf of the State Governments are financed by the issue of Commonwealth Government securities, to which that Government itself subscribes from its own revenue sources.

Following the June 1970 Premiers' Conference, the Commonwealth Government undertook to provide portion of the States' Loan Council programs in the form of interest-free capital grants. The grants were designed to help the States finance capital works from which debt charges are not normally recovered, such as schools and police buildings, but were not subject to conditions as to the actual purposes for which they might be expended. As these grants replace borrowings that would otherwise be made by the States, substantial savings accrue to the States.

Queensland's loan program allocation of \$182.0m in 1982–83 (\$173.3m in 1981–82) was 13.3 per cent of the six States' total of \$1,373.0m, and comprised borrowings of \$121.4m and interest-free capital grants of \$60.7m.

Specific Purpose Payments

Specific Purpose Payments are payments made to States on the understanding that the money be spent on functions specified by the Commonwealth Government. Payments may be of a *revenue* or *capital* nature.

Revenue Nature

Revenue payments to Queensland for 1982–83 amounted to \$539.8m. The most significant payments were: \$128.7m for universities; \$150.5m for schools; \$92.0m for colleges of advanced education; and \$71.6m for assistance to Local Government. Revenue payments also include assistance under the terms of the Financial Agreement of 1927. The main principles of this agreement provide for the Commonwealth Government to make contributions towards interest and sinking funds on States' debts. Total contributions received by Queensland in 1982–83 under the Financial Agreement, interest and sinking fund, were \$8.0m.

Capital Nature

Specific purpose payments of a capital nature are made either in the form of grants or repayable advances, i.e. loans. In 1982–83 Queensland received \$411.0m, of which repayable advances comprised \$96.8m. Major payments to Queensland included: \$149.4m road grants; \$40.7m for housing; \$30.1m for schools; \$26.0m for natural disaster relief; \$8.0m for universities; \$12.6m for technical and further education; \$30.6m for Australian bicentennial roads development; \$40.0m for the sugar industry; \$20.0m for upgrading transport systems; and \$11.9m for special employment—public housing.

Commonwealth Payments to or for the States

The following tables show the Commonwealth Government payments to and for Queensland for 1972–73 and for each of the six years to 1982–83 and payments to or for all of the States for each of the last six years.

COMMONWEALTH PAYMENTS TO OR FOR QUEENSLAND STATE AUTHORITIES (a)
 (Source: Commonwealth Department of the Treasury)
 (\$'000)

Particulars	1972-73	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>General Revenue Funds</i>							
Tax-sharing grants (b)	271,946	777,608	844,137	952,533	1,093,078	r 1,259,687	1,527,398
Adjustments for previous year ..	—	-7,069	—	—	—	—	—
Special grants	10,000	24,800	21,700	12,400	6,700	58,500	-19,650
Health grants	—	—	—	—	—	165,155	92,970
Total	281,946	795,339	865,837	964,933	1,099,778	1,483,342	1,600,718

<i>General Purpose Capital Funds</i>							
Loan Council borrowings	92,752	126,740	126,740	110,051	115,554	115,554	121,367
Capital grants	31,429	63,370	63,370	55,026	57,777	57,777	60,683
Total	124,181	190,110	190,110	165,077	173,331	173,331	182,050

Specific Purpose Payments—Recurrent Purposes

Payments under Financial Agreement							
Interest on State debt	2,192	2,192	2,192	2,192	2,192	2,192	2,192
Sinking fund on State debt	3,636	4,447	4,740	5,029	5,265	5,517	5,773
Debt charges assistance	4,576	—	—	—	—	—	—
State emergency services	—	379	373	438	552	553	505
Universities	10,664	78,127	80,980	89,684	100,776	118,280	128,673
Colleges of advanced education ..	2,906	56,616	60,465	67,445	76,252	81,840	92,035
Technical and further education ..	—	4,885	5,222	6,932	7,338	8,135	10,722
Schools	6,250	59,853	66,818	74,914	93,611	121,156	150,487
Pre-school education	—	6,958	6,605	6,605	6,605	6,605	6,605
Child care services	—	309	367	580	810	939	1,234
Child migrant and refugee education ..	98	15	172	262	508	243	—
Educational research	60	166	131	124	109	120	17
Public hospital running costs	—	126,960	139,314	152,912	179,541	—	—
Community health	—	5,190	4,979	4,462	5,879	—	—
Tuberculosis control	1,932	667	—	—	—	—	—
School dental scheme	—	2,027	2,383	4,014	4,435	—	—
School to work transition	—	437	722	1,711	5,910	5,201	6,310
Drug education campaigns	—	138	100	178	237	236	270
Blood transfusion services	212	736	777	936	1,004	1,122	1,352
Health planning agencies	—	100	87	100	80	80	20
Home care services	248	2,744	1,797	1,793	1,873	1,498	2,962
Assistance for deserted wives	1,736	3,888	3,665	5,054	3,384	—	—
Crisis accommodation assistance ..	—	—	—	—	—	295	600
Maryborough employment grants ..	—	3,000	3,000	3,450	—	—	—
Employment grants	16,400	—	—	—	—	—	—
Aboriginal advancement	2,269	3,480	3,917	4,331	5,088	5,205	5,565
Assistance for housing	669	480	423	423	423	2,898	423
Local Government tax-sharing assistance	—	27,875	30,252	37,387	50,714	59,158	71,571
Drought—fodder subsidy	—	—	—	—	—	—	7,227
National fitness	—	34	34	34	76	—	—
Bovine brucellosis and T.B. eradication ..	885	4,180	5,272	5,290	5,484	7,853	10,688
Agricultural extension services ..	1,380	2,112	2,112	964	954	—	—
Coal mining industry long service leave ..	316	730	992	1,361	1,271	1,792	2,562
Apprenticeship training	25	971	891	159	14	—	—
Special employment programs	—	—	—	—	—	—	15,950
Legal aid	—	—	—	12	11	33	37
Road safety practices	28	28	28	28	28	28	28
Research grants	641	1,080	1,309	1,422	—	—	—
Natural disaster relief	32	231	1,755	1,303	8,583	2,328	15,808
Other	115	r 252	193	r 108	115	163	219
Total	57,270	401,288	432,067	481,636	569,122	433,469	539,834

COMMONWEALTH PAYMENTS TO OR FOR QUEENSLAND STATE AUTHORITIES (a)—continued
(\$'000)

Particulars	1972-73	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
<i>Specific Purpose Payments—Capital Purposes</i>							
Housing for servicemen	400	12,500	5,229	—	800	1,500	2,440
Universities	2,545	7,335	6,042	8,755	6,253	9,509	7,966
Colleges of advanced education	3,806	7,899	10,712	5,056	5,674	5,711	4,727
Technical and further education	1,910	8,735	15,078	12,717	12,277	15,420	12,642
Schools	4,366	34,263	29,475	24,609	21,015	25,216	30,104
Video facilities	—	—	—	—	—	820	514
Mental health institutions	967	—	—	—	—	—	—
Hospitals	—	7,130	—	—	—	—	—
Nursing homes	240	—	—	—	—	—	—
Community health program	—	1,770	254	327	450	—	—
Tuberculosis control	27	—	—	—	—	—	—
School dental scheme	—	2,841	1,249	402	367	—	—
Blood transfusion services	—	37	34	42	46	60	50
Senior citizens' centres	184	439	553	331	r 490	763	934
Pensioner housing	1,250	1,490	2,050	4,495	4,790	5,009	5,138
Aboriginal advancement	5,431	2,825	2,536	1,613	1,507	936	1,696
Public housing	350	39,810	32,257	16,336	17,000	14,148	15,131
Other housing assistance	—	—	—	5,105	6,810	4,845	13,819
Housing assistance for Aborigines	—	—	—	6,100	6,400	6,628	6,626
Urban flood mitigation	—	r 1,228	r 880	r 862	r 1,031	775	866
National estate	—	310	415	300	330	330	330
1982 Commonwealth Games assistance	—	—	2,500	2,500	2,500	2,500	—
International standard sports facilities	—	—	—	—	—	260	524
Leisure and cultural facilities	—	202	45	138	—	—	—
Railway mainline upgrading	—	—	—	1,907	3,851	8,540	6,000
Roads (c)	57,624	100,000	106,947	114,947	127,764	139,361	149,348
Australian bicentennial roads development	—	—	—	—	—	—	30,608
Urban public transport	—	15,648	8,875	9,219	7,875	—	—
Upgrade transport systems	—	—	—	—	—	—	20,000
Transport planning and research	—	1,381	983	1,056	957	—	—
Julius Dam	—	325	500	250	250	—	—
Ross River Dam	1,500	—	—	—	—	—	—
Gladstone Power Station	14,000	191	—	—	—	—	8,042
Softwood forestry	2,160	—	1,485	977	841	784	261
Dairy adjustment program	2,000	43	—	—	—	—	—
Rural adjustment scheme	—	9,480	9,285	2,116	2,802	2,728	2,824
Beef industry assistance	—	33	—	—	—	—	—
Rural reconstruction	7,300	31	—	—	—	—	—
Sugar industry	—	—	—	27,842	—	—	40,027
Burdekin Dam construction	—	—	—	—	—	—	3,761
Bundaberg Irrigation Works	4,425	1,500	950	2,500	2,500	4,000	4,000
Fairbairn Dam	1,988	—	—	—	—	—	—
Eton (Mackay) Irrigation System	—	—	—	—	1,300	991	2,700
Water resources assessment	563	952	952	952	1,050	1,050	1,050
Leslie Dam	—	—	—	—	—	—	1,000
Brigalow lands development	698	—	—	—	—	—	—
Special employment—public housing	—	—	—	—	—	—	11,900
Natural disaster relief	-74	14,842	7,207	6,529	13,460	7,785	25,976
Other	84	114	r 44	r 15	r 3	415	—
Total	113,744	273,354	246,537	257,998	r 250,393	260,084	411,003

Total Payments and Loan Council Borrowing Programs

General purpose	406,127	985,449	1,055,947	1,130,010	1,273,109	1,656,673	1,782,768
Specific purpose	171,014	674,642	678,604	739,634	r 819,516	693,553	950,837
Total	577,141	1,660,091	1,734,551	1,869,644	r 2,092,625	2,350,226	2,733,605

(a) Including Loan Council borrowings and other advances (gross); excluding direct payments to local authorities.
grants up to 1975-76.

(b) Financial assistance grants up to 1975-76. (c) Including, in addition to general roads payments, payments for beef cattle roads, Barkly Highway maintenance, and road safety improvements.

COMMONWEALTH PAYMENTS TO OR FOR STATE AUTHORITIES (a)
 (Source: Commonwealth Department of the Treasury)
 (\$m)

State	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
GENERAL REVENUE ASSISTANCE (b)						
New South Wales	1,320	1,464	1,663	1,839	2,512	2,831
Victoria	985	1,090	1,234	1,355	1,828	2,063
Queensland	795	866	965	1,100	1,483	1,601
South Australia	508	560	630	692	770	884
Western Australia	520	580	663	734	965	1,053
Tasmania	214	241	273	299	327	368
Total	4,341	4,800	5,428	6,018	7,885	8,800
GENERAL PURPOSE CAPITAL GRANTS						
New South Wales	154	154	134	141	141	148
Victoria	120	120	104	109	109	115
Queensland	63	63	55	58	58	61
South Australia	62	62	54	57	57	60
Western Australia	44	44	38	40	40	42
Tasmania	33	33	29	31	31	32
Total	478	478	415	436	436	458
SPECIFIC PURPOSE RECURRENT GRANTS						
New South Wales	1,013	1,076	1,196	1,378	991	1,246
Victoria	783	836	915	1,050	836	1,038
Queensland	401	432	482	569	433	540
South Australia	292	300	325	371	390	483
Western Australia	295	311	340	397	275	323
Tasmania	90	93	103	120	125	143
Total	2,874	3,048	3,360	3,886	3,049	3,773
SPECIFIC PURPOSE CAPITAL GRANTS						
New South Wales	327	324	353	374	384	505
Victoria	237	235	246	267	307	378
Queensland	209	198	209	219	229	314
South Australia	98	92	103	107	113	163
Western Australia	113	117	122	129	143	189
Tasmania	46	40	49	58	67	88
Total	1,031	1,006	1,082	1,153	1,244	1,636
SPECIFIC PURPOSE LOAN PAYMENTS						
New South Wales	166	142	80	114	94	103
Victoria	128	104	61	67	54	83
Queensland	65	48	49	32	31	97
South Australia	95	67	35	35	23	53
Western Australia	62	49	28	36	24	29
Tasmania	29	23	11	12	10	9
Total	544	432	264	296	236	373
TOTAL PAYMENTS						
New South Wales	2,980	3,160	3,426	3,847	4,122	4,833
Victoria	2,253	2,385	2,560	2,848	3,135	3,677
Queensland	1,533	1,608	1,760	1,978	2,235	2,612
South Australia	1,055	1,081	1,148	1,261	1,353	1,642
Western Australia	1,035	1,100	1,191	1,336	1,447	1,636
Tasmania	412	430	465	519	559	640
Total	9,268	9,764	10,549	11,789	12,851	15,041

COMMONWEALTH PAYMENTS TO OR FOR STATE AUTHORITIES (a)—continued
(\$m)

State	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
STATE GOVERNMENT LOAN COUNCIL BORROWING PROGRAMS						
New South Wales	309	309	268	282	282	296
Victoria	240	240	209	219	219	230
Queensland	127	127	110	116	116	121
South Australia	125	125	108	114	114	119
Western Australia	88	88	77	81	81	85
Tasmania	67	67	58	61	61	64
Total	956	956	830	872	872	915
TOTAL PAYMENTS AND LOAN COUNCIL BORROWINGS						
New South Wales	3,289	3,469	3,695	4,129	4,404	5,129
Victoria	2,494	2,625	2,769	3,067	3,354	3,907
Queensland	1,660	1,735	1,870	2,093	2,350	2,734
South Australia	1,180	1,205	1,256	1,375	1,466	1,762
Western Australia	1,123	1,189	1,267	1,417	1,528	1,721
Tasmania	479	497	523	580	620	704
Total	10,224	10,720	11,379	12,660	13,722	15,956

(a) Excluding direct payments to local authorities grants.

(b) Including tax sharing grants, special grants, and, from 1981-82, identified health grants.

3 PUBLIC AUTHORITY FINANCE

The system of public finance statistics followed by the Australian Bureau of Statistics is designed to provide, for the public sector, statistics which complement the accounts for individual sectors provided in the Australian National Accounts. These statistics are intended to:

- consolidate the transactions of the various public authorities and present them so that their economic impact can be assessed;
- show the purposes that are being served by government expenditure programs;
- show the roles of the various levels of government in the undertaking and financing of these expenditure programs; and
- indicate the comparative standing of the States in relation to various expenditure programs, the varying scope of their public enterprises, their sources of revenue, etc. Analysis and comparison of figures on a State basis should take account of differences in the institutional structures of the States.

The system is essentially a re-classification of information given in the published accounting statements and reports of public authorities, supplemented where appropriate and feasible by additional dissections of reported transactions and balances. The analysis in Queensland covers the Consolidated Revenue Fund, Trust and Special Funds, and Loan Fund of the State Government, selected subsidiary authorities and instrumentalities, and Local Authorities.

The financial transactions of these public authorities are analysed and then re-classified according to *economic type* and *purpose*, as opposed to conventional accounting presentations which reflect the organisational and institutional characteristics of receipts and outlays, e.g. salaries and wages, stores and stationery, buildings and works.

Historical series shown in the tables are not always comparable with those shown in previous issues due to amendments in the economic type and purpose classifications and variations in the number of semi-government authorities included in the analysis.

**STATE AND LOCAL AUTHORITIES: OUTLAY AND RECEIPTS, QUEENSLAND
(\$'000)**

Economic type	1976-77 r	1977-78 r	1978-79 r	1979-80 r	1980-81 r	1981-82
OUTLAY						
Final consumption expenditure	1,278,677	1,446,436	1,563,541	1,730,285	2,055,759	2,350,907
Gross capital formation						
Increases in stocks	761	13,501	7,259	798	8,219	5,246
Expenditure on new fixed assets	911,177	985,112	1,086,404	1,233,606	1,402,040	1,890,092
Expenditure on existing assets (net)	- 1,294	567	- 11,082	- 3,314	- 22,145	- 14,617
Total gross capital formation	910,644	999,180	1,082,581	1,231,090	1,388,114	1,880,721
Transfer payments						
Interest	272,368	301,007	362,166	416,005	493,128	561,800
Personal benefit payments	33,873	37,371	37,626	35,308	31,078	38,325
Subsidies	6,478	14,020	21,468	11,119	18,477	15,459
Grants for private capital purposes	9,778	12,273	12,644	9,628	16,248	22,557
Total transfer payments	322,497	364,671	433,904	472,060	558,931	638,141
Net advances	46,169	57,153	13,057	67,629	17,138	50,351
Total outlay	2,557,987	2,867,440	3,093,083	3,501,064	4,019,942	4,920,120
Current outlay	1,591,396	1,798,834	1,984,801	2,192,717	2,598,442	2,966,491
Capital outlay	966,591	1,068,606	1,108,282	1,308,347	1,421,500	1,953,629
RECEIPTS AND FINANCING ITEMS						
Receipts						
Taxes, fees, fines, etc.	616,941	668,985	723,512	809,131	968,847	1,204,349
Income from public enterprises	123,771	114,178	163,593	199,252	216,603	249,039
Property income						
Interest	79,076	108,794	120,383	150,361	205,935	299,019
Land rent, royalties, and dividends	61,268	65,512	67,426	87,959	89,549	103,573
Grants from the Cwlth Government						
For current purposes	1,015,879	1,197,121	1,298,612	1,447,480	1,670,195	1,918,428
For capital purposes	274,652	273,544	262,207	265,037	277,013	289,677
Total receipts	2,171,587	2,428,134	2,635,733	2,959,220	3,428,142	4,064,085
Financing items						
Net borrowing	180,575	219,698	342,502	387,021	398,769	580,611
Advances from the Cwlth Govt (net)	177,381	156,429	136,667	113,749	76,851	102,367
Net receipts of private trust funds	118,543	123,635	115,988	106,117	152,600	164,742
Reduction in cash and bank balances	- 152,751	- 180,756	- 186,799	- 158,548	- 240,625	- 342,862
Reduction in security holdings	- 13,039	- 3,363	- 26,963	- 12,077	- 14,656	- 15,462
Other funds available (including errors and omissions)						
Depreciation allowances	40,785	54,304	55,409	67,481	81,299	92,295
Other	34,906	69,359	20,546	38,101	137,562	274,344
Total financing items	386,400	439,306	457,350	541,844	591,800	856,035
Total funds available	2,557,987	2,867,440	3,093,083	3,501,064	4,019,942	4,920,120

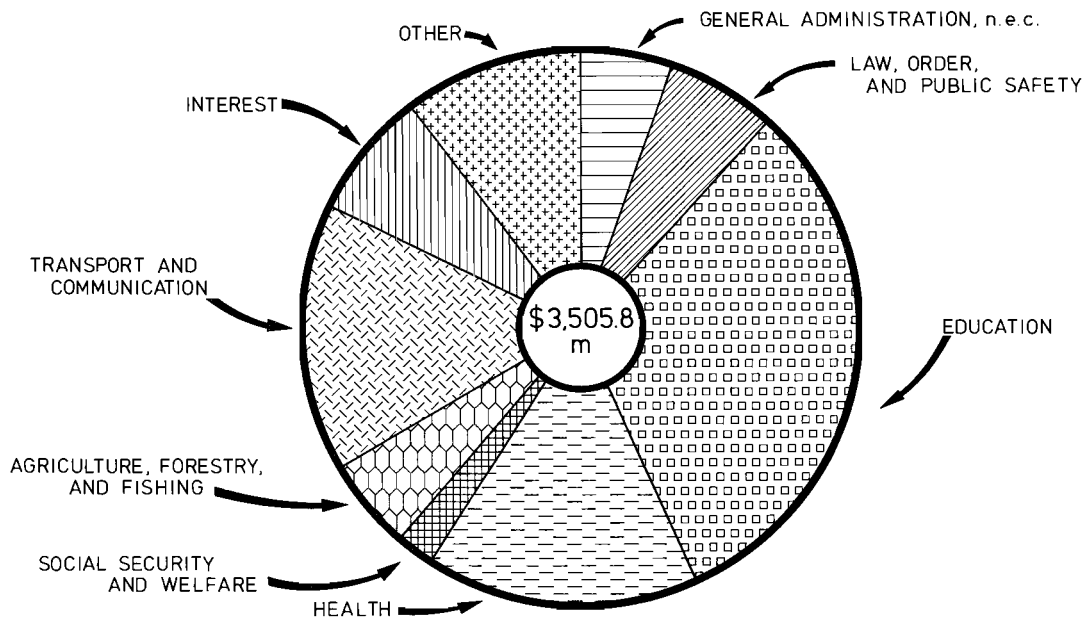
In the process of consolidation, transfers between funds and accounts within the accounting systems of individual authorities are eliminated, as are transfers between authorities. This is apparent in the next table which shows the economic type classification of receipts and outlays for each level of government separately and as consolidated totals.

STATE AND LOCAL AUTHORITIES: OUTLAY AND RECEIPTS BY LEVEL OF GOVERNMENT, QUEENSLAND, 1981-82
(\$'000)

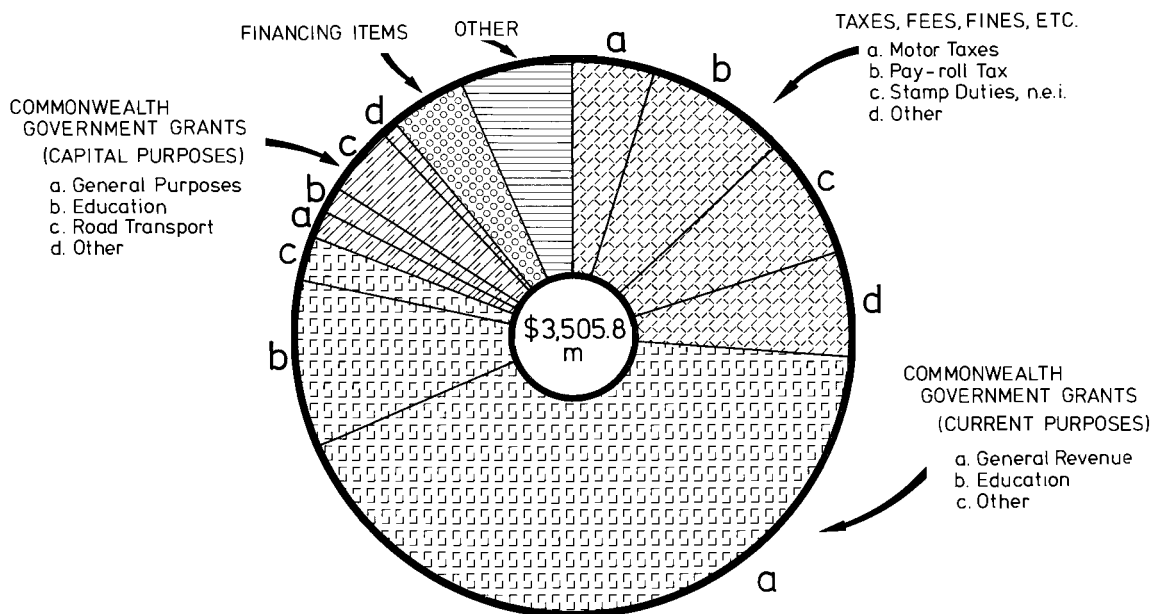
Economic type	Queensland Government	Semi-govt Authorities	Local Authorities	All public authorities
OUTLAY				
Final consumption expenditure	2,144,079	60,124	146,704	2,350,907
Gross capital formation				
Increases in stocks	- 4,751	9,997	—	5,246
Expenditure on new fixed assets	861,359	612,250	416,483	1,890,092
Expenditure on existing assets (net)	- 28,039	15,332	- 1,910	- 14,617
Total gross capital formation	828,569	637,579	414,573	1,880,721
Transfer payments				
Interest	260,522	176,784	124,494	561,800
Personal benefit payments	38,325	—	—	38,325
Subsidies	15,459	—	—	15,459
Grants for private capital purposes	22,557	—	—	22,557
Grants to Local Authorities				
For current purposes	68,338	- 5,931	—	(a)
For capital purposes	76,284	—	—	(a)
Total transfer payments	481,485	170,853	124,494	(a) 638,141
Net advances				
To the private sector	37,841	12,510	—	50,351
To Local Authorities	13,806	—	—	(a)
Total outlay	3,505,780	881,066	685,771	(a) 4,920,120
Current outlay	2,526,723	230,977	271,198	(a) 2,966,491
Capital outlay	979,057	650,089	414,573	(a) 1,953,629
RECEIPTS AND FINANCING ITEMS				
Receipts				
Taxes, fees, fines, etc.	917,061	4,102	283,186	1,204,349
Income from public enterprises	- 99,253	273,705	74,587	249,039
Property income				
Interest	224,928	42,056	32,035	299,019
Land rent, royalties, and dividends	103,517	56	—	103,573
Grants from the Commonwealth Government				
For current purposes	1,916,812	—	—	1,916,812
For capital purposes	286,890	—	—	286,890
Direct to Local Authorities	—	—	4,403	4,403
Grants from State Authorities	—	—	138,691	(a)
Total receipts	3,349,955	319,919	532,902	(a) 4,064,085
Financing items				
Net borrowing	172,822	278,535	129,254	580,611
Advances from the Commonwealth Government (net)	102,367	—	—	102,367
Advances from State Authorities	—	—	13,806	(a)
Net receipts of private trust funds	156,031	5,311	3,400	164,742
Reduction in cash and bank balances	- 244,113	- 98,925	176	342,862
Reduction in security holdings	- 10,232	- 5,230	—	- 15,462
Other funds available (including errors and omissions)				
Depreciation allowances	—	92,295	—	92,295
Other	- 21,050	289,161	6,233	274,344
Total financing items	155,825	561,147	152,869	(a) 856,035
Total funds available	3,505,780	881,066	685,771	(a) 4,920,120

(a) Excluding inter-authority grants and advances.

QUEENSLAND GOVERNMENT FINANCE, 1981-82



OUTLAY
(PURPOSE)



RECEIPTS AND FINANCING ITEMS
(ECONOMIC TYPE)

As indicated at the beginning of this section, the *economic type* classification categorises transactions between public authorities, and between public authorities and the private sector, in a way which facilitates a study of the impact of government transactions on the economy.

The *purpose* classification, by bringing together outlays with similar objectives or purposes, indicates the broad purposes of public spending and the share of resources available to public authorities devoted to the various avenues of expenditure, thus facilitating assessment of effectiveness of outlays in meeting government policy objectives. The purpose classification is based on the classification recommended in the United Nations System of National Accounts¹.

A purpose classification of final consumption expenditure and expenditure on new fixed assets by all Queensland public authorities is shown in the ABS bulletins *Government Finance* (Catalogue No. 5503.3) and *State and Local Government Finance, Australia* (Catalogue No. 5504.0). These final expenditures on goods and services account for a large proportion of total outlays.

Tables showing final consumption expenditure, and expenditure on new fixed assets by the Queensland Government, classified by purpose, appear in the following section (Section 4) which provides more detailed information on the major financial transactions of the State Government.

¹ United Nations, *A System of National Accounts* (Studies in Methods, Series F, No. 2, Rev. 3, U.N. Statistical Office 1968).

4 QUEENSLAND GOVERNMENT FINANCE

The financial transactions of the Queensland Government are recorded in three funds, the Consolidated Revenue, Trust, and Loan Funds. Since substantial amounts may be transferred between these funds, particularly the Consolidated Revenue and Trust Funds, the simple aggregate of receipts and expenditure of these funds in any year will overstate the volume of Queensland Government financial transactions.

QUEENSLAND GOVERNMENT RECEIPTS AND EXPENDITURE
(Source: Queensland Treasury Department)
(\$'000)

Year	Receipts			Expenditure		
	Consolidated Revenue	Trust Funds	Loan Fund	Consolidated Revenue	Trust Funds	Loan Fund
1976-77	1,610,538	1,792,796	244,758	1,611,555	1,687,601	244,739
1977-78	1,815,953	1,881,173	274,713	1,816,863	1,754,292	274,695
1978-79	1,947,444	2,087,974	267,915	1,946,867	1,910,826	267,899
1979-80	2,206,954	2,263,384	268,594	2,207,893	2,143,272	268,531
1980-81	2,604,036	2,655,687	273,686	2,604,010	2,509,450	273,279
1981-82	3,276,756	3,361,952	286,958	3,276,926	3,119,235	285,299

The tables which appear in the remainder of this section are based on the system of public finance statistics described in Section 3. They are presented on a consolidated basis whereby the net effect of the Queensland Government revenue and expenditure programs is shown.

Outlay

The following table classifies outlay according to economic type of transaction. The major components of outlay in 1981-82 were final consumption expenditure and expenditure on new fixed assets, which accounted for \$2,144.1m and \$861.4m, respectively, of the total outlay of \$3,505.8m. Current items accounted for \$2,526.7m, while \$979.1m was spent on capital items.

QUEENSLAND GOVERNMENT: OUTLAY
(\$'000)

Economic type	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Final consumption expenditure						
Purchase of goods and services	r 1,180,090	1,333,783	r 1,433,829	r 1,612,447	r 1,930,951	2,225,722
Grants to private non-profit organisations for current purposes	46,200	54,326	r 65,148	r 77,350	r 83,483	98,058
Less Charges for goods and services supplied	72,117	84,687	100,318	115,936	134,973	179,701
Total	r 1,154,173	1,303,422	1,398,659	1,573,861	r 1,879,461	2,144,079
Gross capital formation						
Increase in stocks	161	735	- 434	1,086	- 248	- 4,751
Expenditure on new fixed assets						
Public enterprises	118,740	57,151	122,628	127,389	131,783	304,375
General government	400,332	416,515	418,926	441,336	r 463,469	556,984
Expenditure on existing assets (net) ..	- 7,505	- 3,756	- 15,495	- 15,761	- 14,951	- 28,039
Total	511,728	470,645	525,625	554,050	r 580,053	828,569
Transfer payments						
Interest	r 150,218	r 156,731	r 172,597	r 198,862	r 223,188	260,522
Personal benefit payments	33,873	37,371	37,626	35,308	31,078	38,325
Subsidies paid						
To private enterprises	1,359	4,564	8,475	6,769	6,539	7,043
To public enterprises	5,119	9,456	12,993	4,350	11,938	8,416
Grants for private capital purposes ..	9,778	12,273	12,644	9,628	16,248	22,557
Grants to Local Authorities (a)						
For current purposes	29,939	37,437	40,555	50,239	63,554	68,338
For capital purposes	59,920	59,111	61,851	81,312	71,881	76,284
Total	r 290,206	r 316,943	r 346,741	r 386,468	r 424,426	481,485
Net advances						
To the private sector	24,542	25,429	r 14,861	r 43,459	r 4,704	37,841
To Local Authorities	r 12,530	r 6,859	r 9,856	r 6,188	r 6,438	13,806
Total	r 37,072	r 32,288	r 24,717	r 49,647	r 11,142	51,647
Total outlay	r 1,993,179	r 2,123,298	r 2,295,742	r 2,564,026	r 2,895,082	3,505,780
Current outlay	r 1,374,681	r 1,548,981	r 1,670,905	r 1,869,389	r 2,215,758	2,526,723
Capital outlay	r 618,498	r 574,317	r 624,837	r 694,637	r 679,324	979,057

(a) Including Commonwealth Grants to the State for on-passing to Local Authorities being \$32,000 for current purposes and \$24,330,000 for capital purposes in 1981-82.

The following table shows total outlay classified by broad economic type and purpose.

QUEENSLAND GOVERNMENT: OUTLAY BY ECONOMIC TYPE AND PURPOSE, 1981-82
(\$'000)

Purpose	Economic type				Total
	Final consumption expenditure	Gross capital formation	Transfer payments	Net advances	
General public services					
General administration, n.e.c.	155,333	31,668	1,485	—	188,486
Law, order, and public safety	207,429	16,617	3,406	—	227,452
Education	968,741	96,128	32,721	—	1,097,590
Health	556,403	8,754	- 1,935	- 2,160	561,062
Social security and welfare	58,408	2,700	14,566	—	75,674
Housing and community amenities ..	- 1,077	12,226	2,062	16,090	29,301
Recreation and related cultural services ..	29,326	18,180	15,903	6,305	69,714

QUEENSLAND GOVERNMENT: OUTLAY BY ECONOMIC TYPE AND PURPOSE, 1981-82—continued
(\$'000)

Purpose	Economic type				Total
	Final consumption expenditure	Gross capital formation	Transfer payments	Net advances	
Economic services					
General administration, regulation, and research	6,065	- 615	—	—	5,450
Agriculture, forestry, and fishing	133,773	47,460	- 1,919	3,560	182,874
Mining, manufacturing, and construction	11,947	11,994	1,942	12,210	38,093
Electricity and water supply	6,576	79,612	8,139	- 2,378	91,949
Transport and communication	- 1,536	502,828	36,218	7,261	544,771
Other economic services	12,707	1,017	—	148	13,872
Other purposes					
General purpose inter-authority transfers	—	—	100,601	6,545	107,146
Natural disaster relief	- 16	—	7,774	4,066	11,824
Interest	—	—	260,522	—	260,522
Total	2,144,079	828,569	481,485	51,647	3,505,780

Final Consumption Expenditure

The following table shows a detailed dissection, classified by purpose of transaction, of the Queensland Government's outlay on final consumption goods and services.

QUEENSLAND GOVERNMENT: FINAL CONSUMPTION EXPENDITURE BY PURPOSE
(\$'000)

Purpose	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
General public services						
General administration, n.e.c.						
General administration	76,018	80,763	74,228	87,711	102,438	111,316
Fiscal affairs and fiscal administration	14,180	15,158	15,042	17,245	19,272	22,455
Administrative services	300	381	402	537	748	721
General services	9,146	11,817	14,275	17,584	18,147	20,841
Law, order, and public safety						
Law courts and legal services	r 15,424	16,826	16,596	17,146	16,918	19,502
Correctional and custodial services	r 15,260	18,744	20,598	23,012	27,950	32,960
Police services	r 72,706	83,278	90,861	103,316	128,740	147,976
Fire protection services	97	428	306	457	362	398
Road safety	571	643	690	748	856	229
Other services	r 4,784	4,494	4,786	5,003	5,943	6,364
Total	r 208,486	232,532	237,784	272,759	321,374	362,762
Education						
General administration, regulation, and research	r 9,547	9,017	9,238	8,907	14,536	11,621
Primary and secondary education	331,846	379,687	402,642	445,093	523,299	607,622
Vocational training	r 26,302	30,688	35,577	43,778	55,612	70,673
University education	68,892	76,810	81,236	88,790	99,607	118,614
Other higher education	51,772	59,313	62,773	68,795	77,488	82,853
Other education programs						
Handicapped children	16,866	19,828	22,657	28,395	34,977	43,238
Adult education	840	45	30	19	3	3
Education of Aborigines	1,680	1,486	1,478	1,444	533	372
Pre-school and child care	12,661	15,774	18,059	20,655	24,845	28,775
Other education programs	476	544	930	1,220	1,024	4,970
Total	r 520,882	593,192	634,620	707,096	831,924	968,741

QUEENSLAND GOVERNMENT: FINAL CONSUMPTION EXPENDITURE BY PURPOSE—continued
(\$'000)

Purpose	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Health						
General administration, regulation, and research						
Administration and regulation	2,321	2,695	2,920	3,457	4,390	5,238
Medical research	1,152	1,002	1,148	1,365	1,583	1,767
Hospital and clinical services						
Mental health services	r 27,054	31,145	35,068	39,878	45,208	51,891
Nursing homes	343	—	238	239	r - 3,905	-5,307
Other hospital and clinical services ..	219,307	243,497	275,463	310,926	382,339	440,918
Other health services						
Preventive services	4,668	4,254	3,704	4,140	4,316	6,096
Maternal and infant health services ..	r 5,375	5,915	6,003	6,764	7,514	8,216
Health of Aborigines	2,533	2,779	2,774	3,538	3,536	3,794
Domiciliary care	166	193	224	258	314	380
Health of school children	4,968	7,993	7,198	9,216	11,033	12,465
Community health facilities and services	7,172	6,621	5,172	5,583	7,646	7,868
Ambulance services	67	67	67	73	103	100
Other health services, n.e.c.	r 10,266	12,503	14,789	16,827	19,897	22,977
Total	r 285,392	318,664	354,768	402,264	r 483,974	556,403
Social security and welfare						
General administration, regulation, and research	3,656	4,291	4,916	5,826	7,315	8,544
Care of and assistance to						
Aged persons	r 3,135	3,305	4,106	5,174	r 10,094	11,925
Incapacitated and handicapped persons	1,176	1,225	1,702	1,194	1,240	1,456
Families and children	r 3,466	4,654	6,601	9,332	15,694	13,710
Other social security and welfare services						
Services to Aborigines	15,615	14,465	14,215	19,768	r 29,857	20,631
Other	103	1,204	1,589	1,457	2,104	2,142
Total	r 27,151	29,144	33,129	42,751	r 66,304	58,408
Housing and community amenities						
Housing	86	- 18	91	- 991	- 2,932	- 4,003
Protection of the environment						
Sewerage and drainage	- 116	- 106	- 184	- 18	- 282	- 291
Pollution control, n.e.c.	1,067	1,249	1,460	1,811	2,161	2,655
Other environmental protection programs	1,203	1,156	1,377	259	244	312
Community amenities, n.e.c.	—	15	- 165	—	—	250
Total	2,240	2,296	2,579	1,061	- 809	- 1,077
Recreation and related cultural services						
General administration, regulation, and research	158	320	1,248	736	870	967
Cultural facilities	r 4,398	5,022	5,363	6,562	7,137	9,982
Support of the creative and performing arts	31	—	—	60	545	771
Recreational facilities and services ..	r 4,774	5,705	5,613	5,348	8,963	5,900
Other programs	3,994	5,255	5,871	8,351	9,535	11,706
Total	r 13,355	16,302	18,095	21,057	27,050	29,326
Economic services						
General administration, regulation, and research	5,525	6,307	5,305	6,216	5,249	6,065
Agriculture, forestry, and fishing						
Soil and water resources management ..	24,050	25,661	25,070	28,850	34,388	38,626
Forest resources management	6,749	8,574	9,898	11,792	11,308	13,401
Other services to agricultural and pastoral industries	46,651	53,235	57,368	62,358	68,871	81,258
Services to fisheries	705	888	1,251	1,259	2,291	488
Mining, manufacturing, and construction						
Mining activities and services to mining	5,332	5,829	6,740	8,160	7,735	10,234
Manufacturing activities and services to manufacturing	916	920	911	1,130	1,605	1,713
Electricity, gas, and water supply services ..	981	2,814	2,512	4,158	6,750	6,576

QUEENSLAND GOVERNMENT: FINAL CONSUMPTION EXPENDITURE BY PURPOSE—continued
(\$'000)

Purpose	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
<i>Economic services—continued</i>						
Transport and communication	1,006	1,012	2,014	755	530	- 1,536
Other economic services						
Services to tourism	2,865	3,454	4,386	1,579	6,918	8,663
Other	1,887	2,598	2,229	750	4,154	4,044
Total	96,667	111,292	117,684	127,007	149,799	169,532
Other purposes	—	—	—	- 134	- 155	- 16
Total	r 1,154,173	1,303,422	1,398,659	1,573,861	r 1,879,461	2,144,079

Expenditure on New Fixed Assets

Expenditure by the Queensland Government on new fixed assets, classified by purpose, is shown in the following table. In 1981-82 the major expenditure items were: road systems and ancillary facilities, \$257.5m; rail transport, \$156.8m; sea transport, \$96.9m; education, \$96.4m; general public services, \$54.0m; and electricity supply services, \$51.3m.

QUEENSLAND GOVERNMENT: EXPENDITURE ON NEW FIXED ASSETS BY PURPOSE
(\$'000)

Purpose	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
<i>General public services</i>						
General administration, n.e.c.						
General administration	5,036	7,423	10,070	1,514	5,630	5,013
General services	20,773	31,163	34,106	30,674	25,482	27,509
Law, order, and public safety						
Law courts and legal services	1,768	3,083	4,775	9,975	13,960	12,289
Correctional and custodial services	3,614	3,921	2,366	3,001	3,857	2,530
Police services	4,993	3,492	2,582	1,969	3,906	6,279
Other services	—	—	—	—	40	399
Total	36,184	49,082	53,899	47,133	52,875	54,019
<i>Education</i>						
Primary and secondary education	55,524	62,983	52,644	54,511	52,081	55,642
Vocational training	6,909	14,278	18,953	17,686	16,873	18,669
University education	12,405	7,627	6,042	8,762	6,262	9,523
Other higher education	14,829	7,958	10,853	5,056	5,674	5,747
Other education programs						
Handicapped children	4,176	3,774	3,340	3,037	2,934	3,122
Pre-school and child care	6,026	5,541	3,894	3,830	3,153	3,689
Total	99,869	102,161	95,726	92,882	86,977	96,392
<i>Health</i>						
Hospital and clinical services						
Mental health services	3,787	3,208	1,136	2,553	2,422	3,544
Other hospital and clinical services	35,696	32,432	22,217	23,099	18,840	9,211
Other health services						
Maternal and infant health services	39	—	—	—	—	—
Domiciliary care	2,061	2,201	1,429	—	—	—
Community health facilities and services	2,509	822	1,521	967	610	635
Total	44,092	38,663	26,303	26,619	21,872	13,390
<i>Social security and welfare</i>						
Care of and assistance to						
Aged persons	112	130	1,623	3,011	530	686
Families and children	821	1,348	1,475	617	694	1,416
Other social security and welfare services						
Services to Aborigines	1,266	1,637	—	—	1,000	1,000
Other services	1,741	—	23	—	—	—
Total	3,940	3,115	3,121	3,628	2,224	3,102

QUEENSLAND GOVERNMENT: EXPENDITURE ON NEW FIXED ASSETS BY PURPOSE—continued
(\$'000)

Purpose	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Housing and community amenities						
Housing						
For Aborigines	2,649	2,430	2,644	2,395	r —	7,713
Other housing programs	—	—	—	—	1,287	1,566
Protection of the environment	311	259	236	241	814	838
Community amenities, n.e.c.	—	—	—	—	—	1,121
Total	2,960	2,689	2,880	2,636	r 2,101	10,928
Recreation and related cultural services	4,248	2,759	7,720	15,452	19,376	17,280
Economic services						
Agriculture, forestry, and fishing						
Soil and water resources management	20,767	23,039	18,170	21,718	26,881	35,130
Forest resources management	14,706	15,930	15,104	18,587	19,915	20,130
Other services to agricultural and pastoral industries ..	3,743	4,802	4,473	4,635	3,965	4,882
Mining, manufacturing, and construction						
Mining activities and services to mining	4,395	3,352	3,511	3,151	3,423	5,289
Manufacturing activities and services to manufacturing	4,608	5,066	4,200	7,750	7,817	8,950
Electricity, gas, and water supply services						
Electricity supply services	56,332	9,244	17,307	20,915	41,456	51,294
Water supply services	7,562	11,277	14,436	9,896	13,055	28,318
Transport and communication						
Rail transport	62,365	47,436	103,114	100,204	61,029	156,848
Sea transport	3,090	1,368	3,473	6,415	24,885	96,891
Road systems and ancillary facilities	150,176	153,683	168,117	187,104	207,401	257,499
Other economic services	35	—	—	—	—	1,017
Total	327,779	275,197	351,905	380,375	409,827	666,248
Total	519,072	473,666	541,554	568,725	r 595,252	861,359

Receipts and Financing Items

A detailed dissection of funds available to the Queensland Government for the last six years is provided in the next table. Commonwealth Government Grants and Taxation are the most important sources of finance for the Queensland Government, contributing \$2,203.7m and \$917.1m, respectively, of the \$3,505.8m funds available for 1981-82.

QUEENSLAND GOVERNMENT: RECEIPTS AND FINANCING ITEMS
(\$'000)

Economic type	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Receipts						
Taxes, fees, fines, etc.						
Fire brigade contributions (insurance companies)	19,251	23,139	22,311	23,833	28,807	34,379
Land tax	12,764	15,123	16,042	18,386	18,797	25,250
Liquor taxes	20,832	24,384	25,854	29,674	33,249	37,431
Lottery taxes	8,578	8,757	9,523	10,100	11,140	26,901
Motor taxes	80,458	83,572	102,207	103,596	113,521	168,669
Pay-roll tax	162,751	175,792	186,498	205,000	237,751	289,423
Racing taxes	20,706	21,055	23,345	25,414	28,152	30,589
Stamp duties, n.e.i.	90,452	99,820	113,598	144,820	200,648	247,485
Succession and probate duties	25,693	16,901	6,949	3,122	1,931	483
Other	r 30,128	r 31,837	r 34,933	r 39,939	r 47,058	56,451
Total	r 471,613	r 500,380	r 541,260	r 603,884	r 721,054	917,061

QUEENSLAND GOVERNMENT: RECEIPTS AND FINANCING ITEMS—continued
(S'000)

Economic type	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Income from public enterprises	r -37,986	-50,576	-55,601	-62,630	-72,862	-99,253
Property income						
Interest on investments, fixed deposits, etc. ..	r 42,121	r 64,441	r 66,433	r 82,266	r 119,381	187,007
Interest on advances to the private sector ..	15,686	16,041	18,061	29,972	32,640	37,921
Land rent	10,437	11,890	13,780	14,467	16,258	22,135
Royalties and dividends	50,831	53,622	53,638	73,473	73,274	81,382
Total	r 119,075	r 145,994	r 151,912	r 200,178	r 241,553	328,445
Grants from the Commonwealth Government						
For current purposes						
General revenue	687,200	795,339	865,837	964,933	1,099,778	1,483,342
Education	r 186,256	r 207,366	r 221,482	r 248,257	r 291,919	342,519
Health	92,008	135,818	147,640	162,602	191,176	1,448
Other	r 49,153	r 58,104	r 62,945	r 70,778	r 86,027	89,503
Total	1,014,617	1,196,627	1,297,904	1,446,570	r 1,668,900	1,916,812
For capital purposes						
General purpose	60,352	63,370	63,370	55,026	57,777	57,777
Education	59,110	58,232	61,347	51,152	45,222	56,676
Road transport	91,884	101,381	107,930	116,003	128,721	139,361
Other	62,715	48,960	28,767	41,821	44,819	33,076
Total	274,061	271,943	261,414	264,002	276,539	286,890
Total receipts	r 1,841,380	r 2,064,368	r 2,196,889	r 2,452,004	r 2,835,184	3,349,955
Financing items						
Net borrowing						
Public trading enterprises	808	-101	--	--	-	-575
General government	48,061	34,867	90,901	88,309	74,002	173,397
Advances from the Commonwealth Government (net)	177,381	156,429	136,667	113,749	76,851	102,367
Net receipts of private trust funds	115,013	r 113,754	r 103,204	r 98,028	r 143,733	156,031
Reduction in cash and bank balances						
Cash and bank balances	14,027	-17,048	20,291	-14,327	30,597	3,165
Other	-130,596	-109,658	-195,547	-109,831	-181,708	-247,278
Reduction in security holdings						
Private sector securities	--	--	--	--	-8,835	275
Other	8,967	-1,124	-12,169	8,187	-4,468	-10,507
Other funds available (including errors and omissions)						
Depreciation allowance	327	335	--	--	--	--
Other	r -82,189	r -118,524	r -44,494	r -55,719	r -70,274	-21,050
Total financing items	r 151,799	r 58,930	r 98,853	r 112,022	r 59,898	155,825
Total funds available	r 1,993,179	r 2,123,298	r 2,295,742	r 2,564,026	r 2,895,082	3,505,780

5 GOVERNMENT DEBT

Commonwealth and State Governments

The amounts of the Commonwealth and State Government securities on issue at 30 June 1983 are shown in the next table, together with annual interest payable and amounts per head. For the Governments taken together, it will be seen that at 30 June 1983, \$6,919.1m, or 17.68 per cent of the Government securities on issue, is repayable abroad.

Details of government securities on issue and annual interest liability in respect of loans repayable are shown in Australian currency equivalents at the rates of exchange ruling at 30 June

1983. The figures are based on a compilation on uniform lines for all States, presented in the 1983-84 Commonwealth Government Budget Papers.

GOVERNMENT SECURITIES ON ISSUE, AUSTRALIA, 30 JUNE 1983
(Source: Commonwealth Department of the Treasury)

Particulars	Securities on issue		Annual interest payable	
	Total	Per head	Total (a)	Per head
	\$'000	\$	\$'000	\$
On account of States				
New South Wales	5,327,886	995	553,984	103
Victoria	4,045,328	1,003	418,824	104
Queensland	2,198,748	889	213,714	86
South Australia	2,035,241	1,518	214,093	160
Western Australia	1,547,805	1,135	160,757	118
Tasmania	1,114,397	2,578	115,361	267
Maturing overseas	13,924	1	687	—
Maturing in Australia	16,255,481	1,084	1,676,046	112
Total	16,269,405	1,085	1,676,733	112
On account of Commonwealth Government				
Maturing overseas	6,905,160	449	541,235	35
Maturing in Australia	15,953,358	1,038	1,695,554	110
Total	22,858,518	1,487	2,236,788	146
Total all governments	39,127,924	2,546	3,913,521	255

(a) Including in the figures for the States the amounts payable by the Commonwealth Government under the Financial Agreement.

Queensland Government

The following table, which shows a dissection of Queensland Government securities on issue according to the currency in which payable, has been extracted from the Queensland Government Budget document, *The Treasurer's Financial Statement*.

GOVERNMENT SECURITIES ON ISSUE, QUEENSLAND, 30 JUNE 1983
(Source: Queensland Treasury Department)

Currency in which payable	Amount (a)	Interest and exchange (a)		Proportion of total debt
		Payable annually	Average rate	
	\$A'000	\$A'000	%	%
Australian Dollars	2,196,256	214,681	9.8	99.9
Pounds Sterling	957	57	6.0	—
United States Dollars	1,535	88	5.8	—
Total	2,198,748	214,826	9.8	100.0

(a) Converted to Australian currency at rates of exchange at 30 June 1983. If overseas loans are converted at the 'mint' par rate of exchange, i.e. rate prevailing on 1 July 1927, securities on issue amounted to \$2,197,901(000).

In addition, at 30 June 1983 the State Government owed the Commonwealth Government \$827.5m under the following schemes: Commonwealth and State Housing Agreement, \$462.7m; Gladstone Power Station, \$174.7m; Rural Reconstruction, \$21.1m; Backlog Sewerage Agreement, \$21.5m; Mount Isa Railway, \$4.1m; National Railway Network, \$25.7m; Fitzroy Brigalow Land Development, \$10.7m; Softwood Forestry Agreement, \$17.6m; Rural Adjustment, \$24.1m; International Sugar Agreement, \$40.0m; Natural Disaster Relief, \$13.3m; and other schemes, \$12.1m. These amounts are excluded from figures in the tables and are supplementary to a number of State Acts under which loan moneys are provided for the same purposes.

Details of Local and Semi-government debt are excluded from this section. Section 7 shows details of Local Government debt.

6 TAXATION

This section gives some particulars of the principal taxes collected in Queensland by the Commonwealth and State Governments.

Under the Constitution, the Commonwealth Government is given the exclusive right to customs and excise duties, while other forms of taxation are shared with the State Governments. The position reached in practice before World War II was that, in addition to customs and excise duties, the Commonwealth Government had the sole right to sales and similar taxes. The States shared with the Commonwealth Government the fields of income and land taxes, and death duties. For the most part, the Commonwealth Government left the States in exclusive possession of stamp duties, licences, and gambling taxes.

From 1 July 1942 the Commonwealth Government became the sole collector of income tax, and reimbursements of income tax were made to all States. From July 1941 a pay-roll tax was collected by the Commonwealth Government, but since 1 September 1971, the State Governments have collected this tax within the States.

Taxation Paid in Queensland

The next table shows details of State and Commonwealth taxation and the amount per head collected in Queensland. The figures for Commonwealth taxation represent the amounts collected in Queensland, but do not indicate the amounts contributed by the people of this State.

TAXES, FEES, FINES, ETC., COLLECTED IN QUEENSLAND, 1981-82

Type of tax	State (a)	Commonwealth (b)	Total (a)	Per head of population
	\$m	\$m	\$m	\$
Customs duties				
Imports	—	211.0	211.0	88
Coal exports .. .	—	76.2	76.2	32
Departure tax .. .	—	3.6	3.6	2
Excise duties .. .	—	489.6	489.6	205
Fire brigade contributions from insurance companies etc. . . .	34.4	—	34.4	14
Income taxes				
Individuals	—	2,617.0	2,617.0	1,097
Companies	—	616.5	616.5	259
Dividend (withholding)	—	4.1	4.1	2
Interest (withholding)	—	4.3	4.3	2
Superannuation funds	—	2.0	2.0	1
Land tax	25.3	—	25.3	11
Liquor taxes	37.4	—	37.4	16
Lottery taxes	26.9	—	26.9	11
Machinery and scaffolding fees	4.8	—	4.8	2
Motor taxes				
Drivers etc. licences and fees	15.3	—	15.3	6
Motor vehicle registration fees and taxes	131.3	—	131.3	55
Motor vehicle registration stamp duty	19.1	—	19.1	8
Road maintenance contributions	0.1	—	0.1	—
Road transport taxes	3.0	—	3.0	1
Motor vehicle insurance nominal defendant fund fees	5.3	—	5.3	2
Pay-roll tax	289.4	—	289.4	121
Primary production taxes	2.0	22.7	24.7	10
Racing taxes	30.6	—	30.6	13

TAXES, FEES, FINES, ETC., COLLECTED IN QUEENSLAND, 1981-82—*continued*

Type of tax	State (a)	Commonwealth (b)	Total (a)	Per head of population
	\$m	\$m	\$m	\$
Sales tax	—	321.7	321.7	135
Soccer Pools tax	3.0	—	3.0	1
Stamp duty, n.e.i.	247.5	—	247.5	104
Succession, probate, and estate duty	0.5	1.0	1.5	1
Sugar Experiment Stations Board Assessment	4.1	—	4.1	2
Other taxes	2.6	0.2	2.8	1
Fees from regulatory services, n.e.i.	17.2	10.6	27.8	12
Fines etc.	21.4	1.0	22.4	9
Total	921.2	4,381.6	5,302.8	2,224

(a) Excluding Local Authorities.

(b) Amounts paid to the Commonwealth in Queensland; the figures do not purport to measure the taxes paid by taxpayers who are resident in Queensland.

Income Tax, Individuals

Income tax on individuals in Australia is collected principally under the 'pay as you earn' system, introduced in 1944. Under this system, tax instalments are taken from the current earnings of recipients of salary or wages. At the end of each income year, tax actually payable is assessed on the basis of annual returns submitted by taxpayers showing incomes from all sources and amounts claimed as deductions and rebates. The amounts of tax as assessed are compared with the totals contributed by instalments and refunds are made, or further payments collected.

Other recipients of personal incomes are assessed for provisional taxation, which means that they are levied tax for the current year on the basis of their incomes in the previous income year. A self-assessment facility for variation of provisional taxation enables the taxpayer to submit his own estimate of his expected income for payment of provisional taxation, penalty rates of additional taxation being levied if the estimate proves to be more than 10 per cent in error.

A new method of tax collection, the Prescribed Payments System, was introduced on 1 September 1983, requiring persons making prescribed payments for labour and services not subject to 'pay as you earn' deductions, to deduct tax from these payments.

The standard rate of tax for 1983-84 is 30 per cent with surcharges of 16 per cent, and 30 per cent on income above specified levels. The 1983-84 rate scale is shown in the following table.

ANNUAL RATES OF INCOME TAX, INDIVIDUALS, 1983-84
(Source: Commonwealth Department of the Treasury)

Total taxable income		Tax on total taxable income	
Exceeding	Not exceeding		
\$	\$	\$	\$
Nil	4,595	Nil	
4,595	19,500	Nil + 30 per cent of excess over 4,595	
19,500	35,788	4,471.50 + 46 per cent of excess over 19,500	
35,788	—	11,963.98 + 60 per cent of excess over 35,788	

Exceptions to the above rate scale apply to certain classes of trustees and persons deemed not to have full and effective control of partnership income, and to minors who have 'non-employment' income in excess of \$416. The tax-free threshold has been withdrawn for non-resident taxpayers.

Taxable Income, 1983-84 — Taxable income to which the general rates apply is defined as total income (other than exempt income) reduced by certain deductions. In arriving at total

income, certain lump sum payments received on retirement or termination of employment in respect of unused annual leave and long service leave, where such unused long service leave is in respect of an eligible service period commencing after 15 August 1978, are to be included. The tax payable on retirement or termination amounts so included is limited to the standard rate which for 1983-84 is 30 per cent.

For 1983-84 the deductions allowed for reducing total income include amounts expended in earning the income, including subscriptions to trade unions or professional associations and other specified deductions, notably contributions to a maximum of \$1,200 by eligible persons to certain classes of superannuation funds.

From the tax payable on taxable income, a series of rebates is allowed for the income year 1983-84.

Concessional Rebate, 1983-84 — A rebate of 30 per cent of the excess of certain concessional expenditure over \$2,000 is allowable. It is allowed for expenses for personal benefit of the taxpayer or his family; medical expenses of the taxpayer and dependants (less medical benefit recoupments), including dental expenses, optical and therapeutic treatment expenses, amounts paid for artificial limbs and eyes, hearing aids, medical and surgical appliances, etc.; funeral expenses up to \$100 for any dependant (except housekeeper) of the taxpayer; life insurance etc. up to \$1,200; educational expenses of each dependent student under 25 years up to \$250; expenses of self education up to \$250; adoption expenses of a child under 21 years; rates and land tax paid in respect of a dwelling, flat, or home unit that was used by the taxpayer as his sole or principal residence up to a maximum of \$300.

Rebates for Dependants, 1983-84 — The maximum amounts of rebate of tax allowable are as follows: dependent spouse, daughter/housekeeper, or housekeeper, \$1,030; spouse without dependent child under 16 years of age or student child under 25 years of age, \$830; dependent parent or parent-in-law, \$749; invalid relative (child, step-child, brother, or sister) aged 16 years or over, \$376. The rebate of tax allowable is decreased by \$1 for every \$4 by which any separate net income exceeded \$282, except for housekeepers.

Home Loan Interest Rebate, 1983-84 — This scheme which provides for a rebate in respect of home loan interest of occupancy of a home has been altered from 1 October 1983. The rebate will generally apply to persons whose occupation date is on or before 30 September 1983. An income test will also apply from 1 October 1983. This test, based on the combined 1982-83 taxable incomes of the taxpayer and spouse, provides that a full rebate is allowable on a combined taxable income of \$24,300 or less and that between \$24,301 and \$27,900 a partial rebate is allowable.

The rebate in respect of that part of home loan interest attributable to the interest rate in excess of 10 per cent has been abolished.

Pensioner Rebate, 1983-84 — This rebate applies to persons receiving taxable social security or repatriation pensions during the 1983-84 year. The maximum rebate of \$250 is reduced by 12.5 cents for each dollar of the taxable income in excess of \$5,429.

Sole Parent Rebate, 1983-84 — A rebate of tax of \$780 is allowed to a parent without a partner who is caring for a dependent child under 16 years or a dependent student under 25 years.

Zone Rebate, 1983-84 — A rebate of tax is allowed to persons who are residents of remote areas. For Zone A the rebate is \$216 plus 50 per cent of rebates for dependants. For Zone B it is \$36 plus 20 per cent of rebates for dependants.

An additional rebate, to benefit persons who live in isolated areas within each zone, was introduced on 1 November 1981. For persons in these isolated areas, the basic rebates for both Zone A and Zone B were increased to \$750 while the rebates for dependants remained at 50 per cent and 20 per cent, respectively.

Health Insurance Rebate, 1982-83 and Dividend Rebate, 1982-83 — These rebates were abolished from 1 July 1983.

Medicare Levy, 1983-84 — The imposition of a levy of 1 per cent of taxable income of residents was introduced, with effect from 1 February 1984. The maximum amount payable by a single taxpayer or married couple will be \$291.20 for the 1983-84 year. Relief from payment of the levy has been provided for low income earners while complete exemption may be granted to veterans and war widows, defence force personnel, and holders of certain health benefit cards.

Income Tax Assessments

The next table shows the tax assessed during 1981-82 on the 1980-81 incomes of Queensland residents.

INCOME TAXATION, QUEENSLAND RESIDENTS, 1981-82
(Source: Commonwealth Department of the Treasury)
(Income Year 1980-81)

Grade of net income	Taxpayers	Total taxable income (a)	Tax payable
\$	No.	\$'000	\$'000
Under 5,000	63,669	285,985	9,325
5,000-7,999	167,652	1,082,279	118,765
8,000-11,999	246,481	2,493,404	438,328
12,000-15,999	190,285	2,621,646	538,415
16,000-19,999	96,202	1,705,354	393,819
20,000-23,999	39,727	863,465	229,095
24,000 and over	43,620	1,457,802	494,743
Total	847,636	10,509,932	2,222,491

(a) Taxable income is derived by deducting all allowable deductions from assessable income.

Income Tax, Companies

For the income year 1982-83 the general rate of income tax payable was 46 per cent of each \$1 of taxable income derived by all companies, with the exception of non-profit companies which are friendly society dispensaries in respect of which the rate was 41 per cent. This exemption is to be removed for the income year 1983-84. Private companies, in addition to the general rate of 46 per cent, may have been liable to undistributed profits tax of 50 per cent of taxable income, less primary tax, retention allowance, and dividends.

Land Tax (State)

Under the *Land Tax Act* 1915-1983 residents, absentees, and companies are required to submit returns of freehold land owned at midnight at 30 June where the total aggregated value, determined by the Valuer-General, exceeds pre-determined limits. For 1983 the limits were \$65,334 for residents, \$10,000 for companies, and \$5,334 for absentees.

A resident individual is allowed a deduction in calculating taxable value. For 1983 the deduction was \$60,000 from the total unimproved value, but where the land was used personally by the owner, or by some other person who was neither an absentee nor a company nor an agent or nominee for an absentee or a company, for primary production, the exemption was the unimproved value of the land so used. No exemption was granted to absentees or companies during 1982-83 with the exception of exempt proprietary companies using land solely for agricultural, dairying, or grazing purposes. Minimum tax for 1983 was \$20 and assessments were not usually issued below this amount. In addition, blocks not exceeding 1.05 hectares used exclusively as a principal place of residence were exempt irrespective of valuation. If in excess of 1.05 hectares a deduction was allowed according to the formula:

$$\frac{1.05 \text{ hectares}}{\text{Total area of parcel}} \times \text{Unimproved value of parcel} = \text{Deduction}$$

Where joint owners were involved, the deduction was related to the proportion of the individual interest in the land.

Land tax is calculated per dollar of taxable value and is based on a graduated scale, unchanged since 1969. Progressively higher rates, commencing at 0.3c in the dollar and rising to 2.5c in the dollar, are applied as the value increases to \$399,999. On taxable values of \$400,000 and over, a flat rate of 2.1c in the dollar is charged.

Allowing for arrears, penalties, etc., the total amount payable during 1982–83 was \$31.8m. The total amount received after allowing for refunds and adjustments was \$28.4m, an increase of \$3.2m on the 1981–82 revenue.

Succession Duty (State) and Estate Duty (Commonwealth)

Duty has been abolished on estates of all persons who died on or after 1 January 1977 in the case of Succession Duty, and 1 July 1979 in the case of Estate Duty.

Pay-roll Tax (State)

Pay-roll tax was introduced by the Commonwealth Government in July 1941 but was transferred to the States on 1 September 1971. From 1 January 1983, the maximum tax exemption level on wages paid has been \$204,000. Since 1 September 1974 the rate has been 5 per cent.

Sales Tax (Commonwealth)

This tax is payable by manufacturers and wholesale merchants. A large list of exemptions is available to assist industry. From 18 August 1982 three rates operate as follows: (i) a general rate of 20.0 per cent covering the majority of taxable goods; (ii) a rate of 7.5 per cent on certain specified classes of goods ordinarily used for household purposes; and (iii) a rate of 32.5 per cent on certain types of non-essential goods.

Wool Tax (Commonwealth)

The object of this tax is to provide funds for the Australian Wool Corporation to promote wool, investigate all aspects of wool marketing, test wool and wool products, conduct research into wool production and wool textiles, and provide a fund for meeting any losses that may arise from minimum reserve price operations. Since 19 August 1975, the rate of this tax has been 8 per cent of the sale value of shorn wool.

Tobacco Charge (Commonwealth)

This charge is used to finance tobacco research and advisory activities. It is levied on growers and manufacturers at 2.5c per kilogram in respect of leaf grown in Australia.

Taxation of Racing and Betting (State)

This taxation, under the *Racing and Betting Act* 1980–1983, comprises betting tax and totalisator tax. Since 1 July 1981, tax on bookmakers' turnover has been 1.67 per cent of all bets made on racecourses within the Metropolitan area, and 1.33 per cent of bets made on racecourses elsewhere in the State. Totalisator tax, charged at varying rates, is payable on all moneys passing through totalisators in the State. For 1982–83, the tax amounted to \$22.4m on a turnover of \$455.1m. Fractions and unclaimed dividends amounted to \$3.9m in 1982–83.

During 1982–83, betting tax on tickets, bookmakers' turnover tax, and total turnover were \$0.2m, \$7.2m, and \$489.1m, respectively.

Totalisator operations are conducted on racecourses by the race clubs and off the course by the Totalisator Administration Board of Queensland (T.A.B.). At 30 June 1983 there were 335 T.A.B. branches and agencies (109 in the Brisbane area and 226 in other parts of the State).

TOTALISATOR OPERATIONS, QUEENSLAND
(Source: Queensland Stamp Duties Office)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Clubs with totalisator licences (a) No.	115	105	87	86	85	78
Meetings held with totalisators No.	1,410	1,365	1,383	1,315	1,415	1,517
T.A.B. branches and agencies No.	326	327	328	319	334	335
Meetings operated on by T.A.B. No.	1,144	1,229	1,202	1,312	1,476	1,571
Total totalisator turnover \$'000	235,178	267,099	291,174	334,982	342,378	455,061
Retained by clubs and T.A.B. \$'000	26,332	29,399	32,229	36,753	44,016	49,977
Totalisator tax \$'000	(b) 11,450	(b) 12,905	(b) 13,974	(b) 15,907	19,754	22,410

(a) Number which operated during the year. (b) Net tax paid to the Government after deducting amounts necessary to provide for minimum dividends and amounts paid to the Anzac Day Trust Fund.

Stamp Duty (State)

This is payable under the *Stamp Act* 1894-1982, in executing instruments relating to the transfer of property, money transactions, and other agreements. Some of these instruments and the duties payable are as follows: cheques—10c on each cheque; conveyances—on the sale of any property, except a principal residence when the rate is \$1.00 per \$100, and stocks and marketable securities, \$1.50 for each \$100 or part thereof, where the value of the consideration for sale does not exceed \$20,000, increasing to where the value of the consideration for sale exceeds \$500,000, when the duty would be \$14,150, plus \$3.50 for every \$100 of the value of the consideration in excess of \$500,000; mortgages—where the secured property is in Queensland, 25c for each \$100 or part thereof; hire purchase agreements—where the 'purchase price' amounts to \$20 or more, duty at the rate of 1.5 per cent of 'the purchase price'; life insurance policies—for the first \$2,000 of the sum insured, 5c for every \$100 or part thereof in excess of \$100, when the sum exceeds \$2,000, 10c for every \$100 or part thereof by which the sum exceeds \$2,000; motor vehicles—registration or transfer of registration, \$1 for every \$100, or part thereof, of the value of the vehicle.

Lottery Tax (State)

To conform with taxation publication principles adopted in this section, profits from the Golden Casket Art Union and Gold Lotto have been treated as taxes. In addition, a stamp duty of 5 per cent on the selling price of the ticket or coupon, with a minimum duty of 3c on any ticket, is payable on tickets issued in a drawing, sweep, or lottery where the prize is paid by means of cash, bonds, inscribed stock, or other negotiable instrument.

Soccer Pools Tax (State)

Under the *Soccer Football Pools Act* 1976-1982 tax is payable by the licensee of a soccer football pool. Thirty per cent of subscriptions is paid as duty of which two-thirds is allocated for the support and development of sporting and youth facilities and one-third to Consolidated Revenue. The amount of tax collected on soccer pools during 1982-83 was \$3.7m.

Liquor Taxation (State)

Fees, assessed on the purchase price of liquor bought during the previous year, are collected from licensees. The fees for general licences, tavern licences, and retail spirit merchant licences are 8 per cent, while wholesale spirit merchant licences are \$400 plus 12 per cent of sales to unlicensed persons.

Customs and Excise Duty (Commonwealth)

The Australian customs tariff has been developed in conformity with the policy of protecting Australian industries from import competition. Duties are also imposed on some

goods, generally of a luxury nature, for revenue purposes, while in 1975–76 a duty was imposed on all coal exported from Australia. Excise duty is levied on specific goods of Australian manufacture. Although these goods do not form a part of overseas trade, the rate of duty is in some cases related to the import duty on similar goods. Customs and excise duties collected by the Commonwealth Government in 1981–82 amounted to \$8,150.4m, of which \$776.8m was collected in Queensland.

Departure Tax (Commonwealth)

A tax on persons departing Australia by sea or air has operated since 15 September 1978. From 1 October 1981, the tax has been levied on people aged 12 years and over at the rate of \$20 per head. In 1981–82, \$3.6m was collected from this tax in Queensland.

Motor Vehicle Taxation (State)

See Chapter 14, Transport and Communication, Section 6.

7 LOCAL GOVERNMENT

Local Authority Areas

Local Authorities operate under the *Local Government Act* 1936–1983, with the exception of the Brisbane City Council, which operates under the *City of Brisbane Act* 1924–1982. Further details on Local Government in Queensland appear in Chapter 4, Government, Section 7.

There are three classes of Local Authority in Queensland. At 30 June 1982, 17 City Councils, including Brisbane, controlled the more important urban areas, and 4 other urban areas were controlled by Town Councils. The rest of the State was administered by 113 Shire Councils. Boundaries of individual Local Authorities appear in the maps between pages 224 and 225, and populations in Chapter 6, Population, Section 3, while for financial details of each Authority, reference should be made to the ABS publication *Local Government* (Catalogue No. 5502.3).

Functions of Local Government

Local Authorities exercise those powers granted to them by statute, chiefly by the Local Government Act (City of Brisbane Act in the case of Brisbane), and also by other Acts conferring specific powers not covered by the principal Act. The Local Government Act, which prescribes the standards to be maintained by Local Authorities, is administered by the Department of Local Government.

All council by-laws must be approved by the Governor in Council, after which they have the force of law. Each Authority must submit a budget showing proposed receipts and expenditure for the ensuing year, and their accounts are audited by the Queensland Auditor-General, or by an auditor appointed by the Minister for Local Government on the recommendation of the Auditor-General.

Apart from roads declared under the Main Roads Acts, Local Authorities are responsible for the construction and maintenance of all roads, streets, and footpaths, etc. within their areas. While declared roads are the responsibility of the State Government, through the Department of Main Roads, Local Authorities are required to contribute towards the cost of construction and maintenance of certain categories of declared roads, see Chapter 14, Transport and Communication, Section 5.

In the field of public health, the most important role is the provision of sewerage and cleansing services in all of the more closely populated centres of the State. Other health services

include immunisation against infectious diseases, mosquito eradication, control of premises where food is prepared, and control of boarding houses.

Local Authorities are largely responsible for the control of building in their areas and have building by-laws which specify certain minimum standards to be observed. For details see Chapter 15, Housing and Construction, Section 2. In recent years Authorities have become increasingly involved in environmental problems such as town planning, beach protection, and anti-litter measures.

Local Authorities also provide and control recreational and cultural facilities and other places of public amusement. Parks, sporting grounds, camping areas, swimming pools, libraries, and civic centres are among the facilities provided by most Authorities in Queensland.

Other functions of Local Authorities include the maintenance of cemeteries, ferries, and aerodromes, and control of noxious weeds and animals (in conjunction with the State Government), straying stock, street naming, and land sub-division.

Business undertakings include the supply of water and provision of sewerage facilities, and, by two Authorities, the provision of passenger bus services. In a few areas facilities such as hostels, picture theatres, hotels, and milk supplies have been provided. Regulated and off-street car parking facilities are also provided by some Local Authorities.

Summary of Statistics

A brief summary of local government statistics for the six years to 30 June 1982 is contained in the next table.

QUEENSLAND LOCAL AUTHORITIES: SUMMARY AT 30 JUNE

Particulars	1977	1978	1979	1980	1981	1982
Estimated resident population (a) No.	2,132,400	2,177,500	2,223,200	2,275,400	2,345,300	2,419,600
Properties rated No.	834,639	873,455	894,126	900,694	925,743	960,646
Premises connected with						
Water No.	583,303	625,335	642,922	670,383	699,257	723,907
Sewerage No.	472,262	495,909	520,767	550,753	577,366	612,271
Total value of property \$'000	3,949,846	4,786,520	5,343,263	6,080,330	6,529,241	8,139,743
Roads open to traffic (b) km	185,548	162,345	160,327	160,745	160,981	162,413
Formed						
Sealed km	42,648	44,121	45,348	46,566	47,562	48,996
Other km	91,527	89,174	89,238	91,220	90,843	92,215
Unformed km	51,373	29,050	25,741	22,960	22,576	21,202

(a) Including residents of unincorporated areas.

(b) Not strictly comparable from year to year because of revisions to road lengths reported by Local Authorities, chiefly in the unformed category. Such variations which occurred from 1977-78 can be largely attributed to a more detailed definitional check conducted by the Local Government Grants Commission of Queensland.

Local Government Receipts and Expenditure

Local Authorities finance their day-to-day operations mainly from rates, sales and charges for services, and government grants, while the provision of capital works and services is financed mainly through loan raisings supplemented by government subsidies.

Rates are levied on the unimproved capital value of land in the Local Authority Area, the valuation of which is determined by the State Government Valuer-General. The unimproved capital value is defined as the amount that would be paid by a willing but not anxious buyer to a willing but not anxious seller for a piece of land, assuming that actual improvements had not been made. Valuations must be made periodically at intervals of not less than five or more than eight years.

Local Authorities impose several types of rates: general rates, which are raised to defray expenses of providing the Authorities' ordinary services; rates for providing a specific service such as water and sewerage etc.; loan rates; and special rates applicable to a benefited area where some special benefit is provided to property owners.

Sales and charges for services are made by Local Authorities for the provision of goods and services such as the supply of water, sewerage and cleansing services, transport services, parking facilities, etc. The charges are generally set on the understanding that they are sufficient only to defray expenses.

Grants and subsidies for approved works are paid to Local Authorities by both the Commonwealth and the State Governments. The Commonwealth Government provides grants to the State for road construction and maintenance and a proportion is allotted to individual Local Authorities to assist in their program of road works. Other Commonwealth Government grants are made for such purposes as Aboriginal advancement and natural disaster relief.

The following tables summarise the transactions of all funds operated by Local Authorities for the years 1979-80, 1980-81, and 1981-82. They combine the transactions of Ordinary Services, Water Supply, Sewerage, Transport, Gas, and Electricity Funds.

QUEENSLAND LOCAL AUTHORITIES: REVENUE AND LOAN RECEIPTS, ALL FUNDS
(\$'000)

Particulars	1979-80	1980-81	1981-82
Rates and charges			
Ordinary services	242,924	287,900	331,542
Sewerage	73,212	80,168	91,793
Water supply	101,606	117,666	139,016
Other	13,591	14,735	15,140
Government grants			
General purpose	42,529	55,870	61,773
Specific purpose	79,949	79,878	95,041
Reimbursements	85,788	88,865	113,180
Other revenue receipts	42,775	71,554	90,540
Loan receipts	168,621	167,503	174,384
Total	850,995	964,141	1,112,410

QUEENSLAND LOCAL AUTHORITIES: OUTLAY, ALL FUNDS
(\$'000)

Particulars	1979-80	1980-81	1981-82
Outlay on goods, services, and land			
Ordinary services: Capital	228,101	234,705	295,935
Current	227,484	264,613	302,978
Sewerage: Capital	57,022	67,178	73,174
Current	29,846	34,310	45,124
Water supply: Capital	47,386	57,141	68,026
Current	54,374	66,104	77,911
Other: Capital	1,477	1,230	1,306
Current	27,227	30,233	35,989
Debt charges: Interest	94,594	112,930	131,778
Redemption	37,392	41,423	44,687
Other outlay	16,576	19,092	24,477
Total	821,479	928,960	1,101,383

The *Local Government (Personal Income Tax Sharing) Act 1976* provides for a scheme of general purpose assistance to local government. Queensland received \$59.2m from the total of

\$350.9m paid to the States for distribution to local government in 1981-82. Amounts subsequently received by Queensland were \$71.6m and \$77.4m for 1982-83 and 1983-84, respectively. These amounts represent 2.0 per cent of Commonwealth Government net personal income tax collections in the preceding years.

Receipts and Outlay

The following table shows details of the Local Authorities component of the consolidated receipts and outlays of Queensland public authorities classified according to economic type as outlined in Section 3. There are some noticeable variations between these figures and those shown in the fund presentation of Local Authority finance statistics earlier in this section, as the table is designed to show the net effect of Local Authority expenditure and revenue programs. The most significant variation occurs in the analysis of Local Authority undertaking funds which have been treated as public trading enterprises in accordance with National Accounting concepts, where expenditure and revenue are offset to show a net operating surplus or deficit. The figures for final consumption expenditure and taxes, fees, fines, etc. reflect this variation in treatment.

QUEENSLAND LOCAL AUTHORITIES: RECEIPTS AND OUTLAY (\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
OUTLAY						
Final consumption expenditure	91,305	106,573	125,061	111,601	123,771	146,704
Gross capital formation						
Expenditure on new fixed assets	236,724	237,066	242,776	306,793	348,562	416,483
Expenditure on existing assets and stocks	- 7,116	- 5,656	- 6,221	- 1,179	- 13,457	- 1,910
Interest paid	67,280	77,782	88,713	92,433	109,430	124,494
Total outlay	388,193	415,765	450,329	509,648	568,306	685,771
Current outlay	158,585	184,355	213,774	204,034	233,201	271,198
Capital outlay	229,608	231,410	236,555	305,614	335,105	414,573
RECEIPTS AND FINANCING ITEMS						
Receipts						
Taxes, fees, fines, etc.	142,545	165,590	179,434	202,190	244,322	283,186
Income from public enterprises	74,297	56,223	63,563	69,834	72,122	74,587
Property income	8,315	10,724	13,146	11,310	20,347	32,035
Grants from State authorities (a)	86,312	93,133	98,747	126,145	128,722	138,691
Grants from Commonwealth Government	1,853	2,095	1,501	1,945	1,769	4,403
Total receipts	313,322	327,765	356,391	411,424	467,282	532,902
Financing items						
Net borrowing	81,066	83,746	80,863	121,786	117,786	129,254
Advances from State authorities (a)	r 13,211	r 6,915	r 9,926	6,236	6,392	13,806
Net receipts of private trust funds	3,308	3,287	1,720	2,000	3,000	3,400
Reduction in cash and bank balances	- 21,085	- 22,929	- 7,145	- 31,855	- 35,376	176
Other funds available (including errors and omissions)	r - 1,629	r 16,981	r 8,574	57	9,222	6,233
Total financing items	74,871	88,000	93,938	98,224	101,024	152,869
Total funds available	388,193	415,765	450,329	509,648	568,306	685,771

(a) Including Commonwealth grants and advances passed on to Local Authorities by the State Government.

Local Authority Loans

Almost all the loan liability of Local Authorities is repayable by half-yearly instalments, and consequently their accumulated sinking funds are small. The total loan liability at 30 June 1982 was \$1,460.3m against which were held sinking fund balances of \$55.4m.

**QUEENSLAND LOCAL AUTHORITIES: LOAN LIABILITY AT 30 JUNE
(\$'000)**

Particulars	1980	1981	1982
Purpose of loan			
Ordinary services	520,629	579,276	644,219
Water supply	279,109	314,210	345,495
Sewerage	345,118	379,258	414,307
Other (a)	70,457	63,295	56,318
Total loan liability	1,215,309	1,336,038	1,460,341
Type of lender			
Government	125,069	129,898	133,669
Banks	540,403	590,160	650,163
Insurance companies (b)	179,705	221,624	243,980
Other	370,128	394,361	432,527
Total loan liability	1,215,309	1,336,038	1,460,341

(a) Including gas, electricity, and transport. Also including loan liability of Brisbane City Council in respect of electricity undertaking acquired on 1 July 1977 by the State Electricity Commission which reimburses the Council for instalments and associated charges. (b) Including the State Government Insurance Office and Workers' Compensation Board.

8 SEMI-GOVERNMENT BODIES

In all States some functions are carried out by means of special statutory authorities whose finances are partly, or completely, excluded from the government accounts. In Queensland certain functions, such as the provision of harbour facilities, supply of electricity, etc., are under the control of local boards, to which the Government has delegated certain statutory powers. The members of these boards are elected, either directly or indirectly, by those persons most immediately affected by their activities.

The financial activity of these semi-government bodies is generally excluded from the public accounts of the State, and, in order to obtain complete figures of government activity on all levels, statistics are included in this chapter showing the financial transactions of these bodies. For greater detail as to their activities, reference should be made to other relevant chapters.

The following table shows, for the latest six years, details of the semi-government component of the consolidated receipts and outlays of Queensland public authorities classified according to economic type as outlined in Section 3 of this chapter. A list of the authorities covered in this analysis is shown in the ABS publication *Government Finance* (Catalogue No. 5503.3).

**QUEENSLAND SEMI-GOVERNMENT BODIES: RECEIPTS AND OUTLAY
(\$'000)**

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
OUTLAY						
Final consumption expenditure	33,199	36,441	39,821	44,823	52,527	60,124
Gross capital formation						
Increase in stocks	600	12,766	7,693	- 288	r 8,467	9,997
Expenditure on new fixed assets	155,381	274,380	302,074	358,088	r 458,226	612,250
Expenditure on existing assets (net)	13,327	9,979	10,634	13,626	6,263	15,332
Transfer payments						
Interest paid	54,870	66,494	100,856	124,710	160,510	176,784
Grants to Local Authorities	- 3,547	- 3,415	- 3,659	- 4,006	- 4,713	- 5,931
Net advances	22,345	31,724	- 1,804	24,170	12,434	12,510
Total outlay	276,175	428,369	455,615	561,123	r 693,714	881,066
Current outlay	84,917	99,520	137,018	165,527	208,324	230,977
Capital outlay	191,258	328,849	318,597	395,596	r 485,390	650,089

QUEENSLAND SEMI-GOVERNMENT BODIES: RECEIPTS AND OUTLAY—*continued*
(\$'000)

Particulars	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
RECEIPTS AND FINANCING ITEMS						
Receipts						
Taxes, fees, fines, etc.	2,783	3,015	2,818	3,057	3,471	4,102
Income from public enterprises	87,460	108,531	155,631	r 192,048	r 217,343	273,705
Property income						
Interest	12,954	17,588	22,743	26,813	33,567	42,056
Land rent, royalties, and dividends	—	—	8	19	17	56
Total receipts	103,197	129,134	181,200	r 221,937	r 254,398	319,919
Financing items						
Net borrowing	50,640	101,186	170,738	r 176,926	r 206,981	278,535
Net receipts of private trust funds	222	6,594	11,064	6,089	5,867	5,311
Reduction in cash and bank balances	- 15,097	- 31,121	- 4,398	- 2,535	- 54,138	- 98,925
Reduction in security holdings	- 22,006	- 2,239	- 14,794	- 3,890	- 1,353	- 5,230
Other funds available (including errors and omissions)						
Depreciation allowance	40,458	53,969	55,409	67,481	81,299	92,295
Other	118,761	170,846	56,396	95,115	r 200,660	289,161
Total financing items	172,978	299,235	274,415	r 339,186	r 439,316	561,147
Total funds available	276,175	428,369	455,615	561,123	r 693,714	881,066

9 STATE FINANCIAL INSTITUTIONS

Agricultural Bank

The Agricultural Bank is one of the main Queensland Government instrumentalities for assisting persons engaged in primary production, and is empowered to make advances to farmers, graziers, contract workers on farm lands, and others engaged in primary production, and also to co-operative companies and commodity boards within the State.

The *Agricultural Bank (Loans) Act* 1959-1981 is the main Act administered by the Bank and most advances are made under its provisions. The Bank also administers advances under *The War Service Land Settlement Acts*, 1946 to 1967 and *The Drought Relief to Primary Producers Acts*, 1940 to 1961. The Bank is also the lending authority under the *Farm Water Supplies Assistance Act* 1958-1979, administered by the Queensland Water Resources Commission, and the *Soil Conservation Act* 1965-1982, administered by the Department of Primary Industries.

A summary of the operations of the Agricultural Bank in regard to advances under the above-mentioned Acts is given in the next table.

QUEENSLAND AGRICULTURAL BANK: SUMMARY OF PRINCIPAL ADVANCES
(Source: Queensland Agricultural Bank)

Act under which advances made	Advances paid			At 30 June 1983	
	1980-81	1981-82	1982-83	Principal and interest owing	Borrowers
	\$'000	\$'000	\$'000	\$'000	No.
Agricultural Bank (Loans) Act and Co-ordination of Rural Advances and Agricultural Bank Acts	44,705	41,441	73,439	233,961	7,534
War Service Land Settlement Acts	—	—	—	3	1
Drought Relief to Primary Producers Acts	—	—	—	831	475
Farm Water Supplies Assistance Act	1,541	1,871	2,734	9,130	640
Soil Conservation Act	11	10	84	113	15

State Government Insurance Office

The State Government Insurance Office conducts life, superannuation, and general insurance business in Queensland. Funds are held primarily in the form of investments. Of the \$816.9m net assets held at 30 June 1983, investments amounted to \$696.8m. The insurance transactions are included in the statistics shown in Chapter 23, Private Finance, Section 3.

Workers' Compensation Board of Queensland

The Board was constituted from 1 July 1978 and carries on the business of workers' compensation insurance previously conducted by the State Government Insurance Office. At 30 June 1983 the net assets of the Board amounted to \$264.8m (30 June 1982, \$230.9m) of which investments accounted for \$173.9m (30 June 1982, \$175.8m). Insurance transactions of the Board are included in the statistics shown in Chapter 13, Wages and Industrial Conditions, Section 6.

Queensland Government Development Authority

This Authority was established in 1982-83 to raise loan money on behalf of selected statutory authorities in Queensland. During 1982-83, \$109.6m was raised of which \$99.3m was loaned to various authorities.

Public Trustee

The Public Trustee (previously the Public Curator) engages in general trustee business, and administers all intestate estates of Queensland residents. Wills are prepared and also deposited in his office for safe custody. The value of estates held in trust at 30 June 1983 was \$60.9m, while \$6.2m was held as unclaimed money.

Assistance to Industries

The Government has for many years had legislative facilities which enabled it to provide financial assistance to industries which were unable to obtain from the usual sources sufficient capital to commence or expand operations. This assistance is provided under the *Industrial Development Act* 1963-1981, administered by the Department of Commercial and Industrial Development. The policy of assistance has been varied and extended from time to time. The total amount of assistance approved under the relevant Acts to 30 June 1983 was \$85.6m. Liabilities under guarantees and advances outstanding totalled \$30.8m at 30 June 1983. The principal industries which have been assisted are oil and natural gas, engineering, cement and brickworks, textile goods processing, tourist, high technology, and general processing industries.

In addition, financial assistance in the form of government guaranteed loans and overdrafts has been given under the *Local Bodies' Loans Guarantee Act* 1923-1979, to co-operative and other boards and associations for establishing industrial projects. The industrial projects include fruit marketing and canning, the sugar and meat industries, and cotton, peanut, tobacco, grain, navy bean, and ginger processing.

Golden Casket Art Union Office

This office conducts the Golden Casket Art Union and the Gold Lotto.

The Golden Casket Art Union was initially established to assist patriotic funds during World War I. Subsequently, the net proceeds (\$7.9m in 1982-83) have been used to assist charitable institutions and hospitals and to provide development funds for cultural and community facilities. During 1982-83 ticket sales, prize money, and commission to agents amounted to \$41.8m, \$26.3m, and \$3.9m, respectively.

The *Lotto Act* 1981-1983 gave authority to conduct Gold Lotto in Queensland from 1 July 1981. Net proceeds from Gold Lotto (\$21.5m in 1982-83) are used for recreational and cultural

facilities. During 1982–83 coupon sales amounted to \$73.8m and prize money of \$44.3m was credited to the prize pool.

Public Service Superannuation

Compulsory superannuation schemes are in force for public servants (including teachers), permanent employees of the Railways Department, hospitals boards, and police.

Under the *State Service Superannuation Act* 1972–1978, the annual benefit payable is based on the final average salary of the contributor, depending on the contributor's length of service, the final average salary being the average salary received during the year immediately preceding the age of retirement. Widows' pensions are payable at two-thirds of the contributor's relevant entitlement and children's pensions are also payable under certain specified conditions.

Members may elect to retire at any time between 60 and 65 years of age on reduced benefits, and may on retirement convert all or any percentage of their entitlements to a lump sum payment.

The Government holds the accumulated balance of the State Service Superannuation Fund on which is allowed interest at the rate of 10 per cent a year. The expenses of administration are paid by the Government. During 1982–83, members' contributions totalled \$65.8m and the employers' contribution totalled \$150.9m, while \$135.1m was received in interest and redemption of investments. Benefits paid amounted to \$91.5m during this period. At 30 June 1983 total funds amounted to \$1,369.8m.

The Police Superannuation Scheme provides for members of the force who retire upon reaching 60 years of age, or earlier for medical reasons, and members who elect to retire at any time between 55 and 60 years of age on reduced benefits. On 1 January 1975 the unit scheme of members' contributions was superseded by a percentage scheme, the earlier scheme now operating in conjunction with the latter scheme.

Members contributing under both schemes may, on retirement, convert all or any percentage of their entitlements to a lump sum payment.

Contributions are made to the fund from Consolidated Revenue to meet the Government's liability and administrative expenses. During 1982–83, members' and government contributions totalled \$6.8m and \$17.0m, respectively, while \$5.3m was received in interest. Benefits paid amounted to \$25.9m during this period. At 30 June 1983 total funds amounted to \$57.9m.

Parliamentary Superannuation

A Parliamentary Superannuation Scheme, details of which are given in Chapter 4, Government, has operated since 1 January 1949. During 1982–83, members' and government contributions totalled \$0.4m and \$1.1m, respectively, while \$0.7m was received in interest. Expenditure on pensions and lump sum payments was \$0.4m, and the fund held a credit balance of \$6.7m at 30 June 1983.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Local Government (5502.3) (*annual*)

Government Finance (5503.3) (*annual*)

Further References—*continued***Central Office Publications**

Government Financial Estimates (5501.0) (*annual*)

State and Local Government Finance (5504.0) (*annual*)

Taxation Revenue (5506.0) (*annual*)

Other Publications

Commonwealth Government Budget Paper No. 7: Payments to or for the States, the Northern Territory and Local Government Authorities, 1983–84.

Chapter 23

PRIVATE FINANCE

1 MONEY AND BANKING

Money

The Commonwealth Parliament is given power under Section 51 of the Constitution of the Commonwealth to make laws with regard to currency, coinage, legal tender, and banking, excepting State banking confined to the limits of the State concerned. Under the *Coinage Act* 1909, the Commonwealth Government acquired control over the coinage for the whole of Australia and the first Australian coins were issued in 1910. All Australia's coin requirements are met by the Royal Australian Mint, Canberra. The Commonwealth Government, from 1911 through the Treasury, from 1920 through the Commonwealth Bank, and from 1959 through the Reserve Bank, has reserved to itself the right of note issue.

Banking

Australia's economic development has been accompanied by a growing financial sophistication and a more general recognition of the need for economic analysis and effective economic policy-making. Between World War I and World War II central banking responsibilities and powers gradually evolved as functions of the Commonwealth Bank of Australia, and in 1945 the Commonwealth Parliament legislated to give full legal effect to those functions and to regulate the banking system as a whole. The Commonwealth Bank of Australia developed further as a central bank when from 3 December 1953 the Commonwealth Trading Bank of Australia was established to take over most of the general trading bank functions of the Commonwealth Bank.

The separation of the trading and central banking functions of the Commonwealth Bank of Australia was completed when legislation was passed in 1959 providing for a new banking structure comprising the Reserve Bank of Australia and the Commonwealth Banking Corporation, both of which came into operation on 14 January 1960. The Commonwealth Banking Corporation is the controlling body for the Commonwealth Trading Bank, the Commonwealth Savings Bank, and the Commonwealth Development Bank. For further information on the administration of the Commonwealth Banking Corporation and the history of the Commonwealth Bank see the 1969 and earlier issues of the *Year Book*.

The general functions of the Reserve Bank are set out in the Reserve Bank Act, and the Bank Board is charged with the duty of ensuring, within the limits of its powers, that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia. It is also the duty of the Board to ensure that the powers of the Bank are exercised in such a manner that, in the opinion of the Board, will best contribute to: (i) the stability of the currency of Australia; (ii) the maintenance of full employment in Australia; and (iii) the economic prosperity and welfare of the people of Australia.

The principal means by which the Bank implements its policies may be summarised under five headings: (i) regulation of trading bank liquidity; (ii) supervision of savings bank investment policy; (iii) controls over bank lending (advance policy); (iv) bank interest rate policy; and (v) open market operations.

Apart from its central banking functions, the Reserve Bank also controls the Australian Note issue through the Note Issue Department, overseas reserves, exchange transactions, and special banking facilities through the Rural Credits Department, and performs banking and other services for government.

Trading Banks

At 30 June 1983, trading bank facilities in Queensland were provided by the major Australian trading banks, the Bank of Queensland Limited, the Banque Nationale de Paris, and the Bank of New Zealand. Operations of these banks are shown in the next two tables.

Amalgamations proposed between the Bank of New South Wales and the Commercial Bank of Australia Limited and between the National Bank of Australasia Limited and the Commercial Banking Company of Sydney Limited, were consented to by the Treasurer on 15 June 1981. The Bank of New South Wales and the Commercial Bank of Australia commenced combined trading as the Westpac Banking Corporation on 1 October 1982. The National Bank of Australasia Limited and the Commercial Banking Company of Sydney Limited commenced combined operations on 1 January 1983 as the National Commercial Banking Corporation of Australia Limited.

ADVANCES AND DEPOSITS OF TRADING BANKS, QUEENSLAND, AT JUNE 1983 (a)
(\$'000)

Bank	Loans, advances, and bills discounted	Deposits		
		Non-interest- bearing	Interest- bearing	Total
Australian and New Zealand Banking Group Ltd ..	828,880	319,924	882,806	1,202,729
Bank of New Zealand	16,327	4,636	6,000	10,636
Bank of Queensland Ltd	54,608	40	70,659	70,699
Banque Nationale de Paris	8,170	2,566	18,307	20,873
Commonwealth Trading Bank of Australia ..	798,606	363,281	828,389	1,191,671
National Commercial Banking Corporation of Australia Ltd	1,069,453	464,883	1,101,383	1,566,265
Westpac Banking Corporation	1,320,303	601,243	1,222,461	1,823,704
All banks	4,096,347	1,756,573	4,130,006	5,886,578

(a) Averages of balances at close of business on Wednesdays in June.

Bank Debits to Customers' Accounts

Bank debits include the total value of cheques drawn throughout Queensland, and are a comprehensive short-term guide to the volume of business activity. In making long-term comparisons, allowance must be made for the effect of changes in prices.

TRADING BANK (a) DEBITS TO CUSTOMERS' ACCOUNTS, QUEENSLAND
(\$'000)

Year	Average weekly debits (b)	Year	Average weekly debits (b)
1973-74	753,419	1978-79	1,517,684
1974-75	817,878	1979-80	1,883,035
1975-76	1,027,353	1980-81	2,356,038
1976-77	1,230,668	1981-82	3,029,592
1977-78	1,385,101	1982-83	3,567,328

(a) Including all trading banks, the Rural Credits Department of the Reserve Bank, and the Commonwealth Development Bank.

(b) Excluding debits to Commonwealth and State Government accounts at capital city branches.

Savings Banks

The Commonwealth Savings Bank opened in Queensland on 16 September 1912 and on 1 October 1920 took over the Queensland State Savings Bank. At the time of amalgamation, the Commonwealth Bank held depositors' balances of about \$6.6m, while the State Bank held about \$30m. During 1956 private savings banks commenced business in Queensland. At 30 June 1983 the Commonwealth Savings Bank operated 169 branches and 1,197 agencies, while private savings banks operated 667 branches and 1,169 agencies in the State.

Depositors' balances held by the Commonwealth Savings Bank at 30 June 1983 were \$1,873.2m, while balances of \$2,262.9m were held by private savings banks.

SAVINGS BANKS, QUEENSLAND

Year	Operative accounts at end of year (a)	Deposits during year (b)	Withdrawals during year (b)	Depositors' balances at end of year	
				Total	Per head of population
	'000	\$'000	\$'000	\$'000	\$
1977-78	2,870	5,435,770	5,255,909	2,446,487	1,129
1978-79	2,955	6,092,502	5,954,093	2,713,304	1,239
1979-80	3,031	6,953,548	6,925,549	2,884,629	1,308
1980-81	3,158	8,534,130	8,367,494	3,232,292	1,398
1981-82	3,274	10,648,240	10,654,766	3,463,335	1,475
1982-83	3,394	12,755,599	12,387,145	4,136,077	1,696

(a) Excluding small inoperative accounts and school bank accounts.

(b) Including transfers between branches of the banks.

Development Banks

The Commonwealth Development Bank of Australia, which operates under the *Commonwealth Banks Act* 1959, provides assistance, through medium-term and long-term loans, for the development of approved enterprises in primary, secondary, and tourist industries.

Loans approved during 1982-83 numbered 2,550 for an amount of \$129m. Outstanding balances at 30 June 1983 totalled \$548m, made up of \$436m in rural loans and \$112m in loans to non-rural undertakings.

In addition, the Bank assists primary producers and industrial enterprises with finance for income-earning equipment under hire purchase and other instalment credit arrangements. Approvals during 1982-83 totalled \$55m to 3,631 applicants while the balances outstanding on these transactions at 30 June 1983 amounted to \$107m.

The Australian Resources Development Bank Limited specialises in arranging finance to assist Australian interests to participate in ventures developing Australia's natural resources. The Bank is owned by Australia's major trading banks and its facilities include organisation of and participation in consortium loans; direct and refinance loans; and equity investment and underwriting or sub-underwriting of equity or fixed interest issues. The Bank broadened its operations in February 1980 with the acquisition of the Australian Banks' Export Re-Finance Corporation Limited as a wholly owned subsidiary. The Corporation operates to refinance extended long-term export loans made by trading banks.

The Bank is funded by share capital and loans subscribed by participating banks, long-term loan capital provided by the Reserve Bank of Australia and the State banks of New South Wales and Western Australia, the issue of Transferable Deposits, and the acceptance of term deposits and overseas deposits.

To 30 September 1983, the Resources Bank had made 51 issues of Transferable Deposits with maturities within the range of four to ten years. Most issues are listed on Australian stock exchanges. Interest rates are in accord with prevailing market rates at the time of issue. Total

consolidated deposits at 30 September 1983 were \$848m, of which \$246m was obtained from overseas. Consolidated loans outstanding amounted to \$875m at 30 September 1983. A more detailed description of the nature of the Bank may be found in the 1969 *Year Book*.

The Primary Industry Bank of Australia Limited, whose main objective is to facilitate the provision, through banks and other lenders, of loans to primary producers for longer terms than are available under normal conditions, was granted authority to conduct business in Australia on 21 September 1978. The Bank's initial share capital was contributed by the major trading banks, four State Government banks (in combination), and the Commonwealth Government.

The Bank's funds are also available from the Income Equalisation Deposit Trust Account and through the issue of certificates of deposit. Loans refinanced by the Bank are for periods up to 30 years and at 30 June 1983 amounted to \$563m.

The Australian Industry Development Corporation (A.I.D.C.) functions under the *Australian Industry Development Corporation Act 1970*. Its chief aims, as a financial institution, are to assist in the development and expansion of Australian industry by arranging for investment, principally from overseas sources, and in ways conducive to the maximising of Australian ownership. Amendments to the Act in 1975 expanded the Corporation's method of operation to include participation in joint ventures and broadened the range of industrial activities eligible for A.I.D.C. finance.

The Corporation has a statutory nominal capital of \$100m, of which \$62.5m had been paid up by the Commonwealth Government at 30 June 1983. The Corporation is allowed to borrow up to a limit of eight times the amount of its capital and reserves. During 1982-83 the Corporation undertook financial commitments totalling \$248m in respect of 35 industry development projects.

Short-term Money Market

For some years prior to 1959, leading stockbrokers had been actively engaged in the acceptance of short-term funds from clients against the security of government bonds under a 'buy back' arrangement. The securities were in fact sold to the lender, and the difference between the agreed selling price and the agreed price paid by the broker on termination of the loan constituted the return to the lender.

In February 1959 the Commonwealth Bank (now the Reserve Bank) gave official status to the market by announcing that under certain conditions it would act as lender of last resort to authorised dealers. The market now includes nine authorised dealer companies. The 'lender of last resort' arrangement enables dealers to borrow from the Reserve Bank against their Commonwealth Government securities which comprise the bulk of their assets. At 30 June 1983 the face value of dealers' holdings of Commonwealth Government securities was slightly above \$1,400m.

The main functions of the authorised dealers in the Short-term Money Market are:

- (a) to accept loans overnight, at call, or for fixed periods, in minimum amounts of \$50,000; and
- (b) to engage as traders in the buying and selling of securities, principally those of the Commonwealth Government.

Lenders to the dealers include trading banks, savings banks, public authorities, and a wide variety of companies; each dealer's liabilities to clients are limited to a specified multiple of its shareholders' funds.

The rates of interest paid by dealers for funds of different maturities vary not only from day to day, and even during the day, depending on the general funds position, but also from dealer to

dealer, according to their individual judgments of future trends in interest rates and the availability of funds.

2 BANKRUPTCY

Under Section 51 of the Constitution of the Commonwealth, power to legislate with respect to bankruptcy and insolvency is vested in the Commonwealth Parliament. In 1924 legislation was passed which provided for the establishment of Registries in the various districts. The Federal Court of Australia exercises jurisdiction in the Southern District of Queensland while the jurisdiction in the Northern and Central Districts is exercised by the respective Supreme Courts.

A bankruptcy petition may be presented by either a creditor or the debtor himself. If the Court decides on sequestration, the bankrupt's affairs are administered by the Official Receiver or a trustee appointed by the bankrupt's creditors. The Court may make similar orders for the administration of the estates of persons dying insolvent. Provisions also exist for arrangements with creditors without sequestration, and these may be in the nature of deeds of assignment or arrangement, or compositions. The Act does not deal with the winding up of companies which is covered by the Companies Acts of the various States.

The next table shows the sequestrations, deeds of assignment or arrangement, and compositions made under the *Bankruptcy Act 1966*.

BANKRUPTCY, QUEENSLAND
(Source: Commonwealth Attorney-General's Department)

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Sequestrations						
Debtors' petitions No.	328	347	476	592	502	532
Creditors' petitions No.	189	191	218	216	140	169
Total No.	517	538	694	808	642	701
Liabilities \$	14,743,880	12,416,885	16,527,196	21,666,655	16,340,334	21,699,391
Assets \$	4,165,282	4,186,959	5,161,612	5,720,795	5,132,426	4,150,480
Administration of deceased debtors' estates .. No.	2	2	1	4	2	2
Liabilities \$	40,202	36,948	21,388	64,438	n.a.	n.a.
Assets \$	29,542	14,064	408	25,467	n.a.	n.a.
Deeds of assignment or arrangement and compositions No.	28	53	(a) 58	65	49	(a) 75
Liabilities \$	1,940,415	9,569,174	4,322,129	10,585,889	5,997,811	6,354,635
Assets \$	518,100	2,111,269	640,402	1,764,681	1,499,753	2,865,845

(a) Including one in 1979-80 and two in 1982-83 for which values of liabilities and assets are not available.

3 INSURANCE

Life Insurance

The Life Insurance Commissioner, under the *Commonwealth Life Insurance Act 1945*, supervises the activities of life insurance companies, which must lodge deposits with the Commonwealth Government Treasurer and maintain statutory funds exclusively for life insurance business.

Insurance business is classified according to State of registration of policy which need not coincide with the State of residence of the insured person. Details of life insurance are shown in the following table.

Life insurance statistics are compiled from returns furnished by companies registered under the Act and made available by the Insurance Commissioner. The statistics in this section include the activities of the State Government Insurance Office which, although not subject to the

requirements of the Act, submits annual returns, thereby enabling complete coverage of life insurance business in Queensland.

LIFE INSURANCE, QUEENSLAND, 1982-83

Particulars	Ordinary and industrial business	Superannuation business	Total
New business			
Policies No.	80,879	19,502	100,381
Sum insured \$m	2,851.1	2,506.6	5,357.7
Annual premiums \$m	28.0	58.0	86.0
Discontinuances			
Policies No.	118,988	7,508	126,496
Sum insured \$m	1,651.3	540.7	2,192.0
Annual premiums \$m	21.0	15.1	36.1
Business at end of year			
Policies No.	1,131,290	120,636	1,251,926
Sum insured \$m	14,643.9	7,469.8	22,113.7
Annual premiums \$m	177.8	188.3	366.1

Insurance Other Than Life

Authority to carry on general insurance business is granted under the Commonwealth *Insurance Act* 1973 which is concerned with ensuring the continued financial solvency of general insurance companies incorporated in Australia and of the Australian business of companies incorporated overseas.

Details in the next table refer to policies issued in Queensland, including those issued by the State Government Insurance Office, irrespective of where the risk is situated. In addition to the premium income shown in the table, insurers received income from investments for which separate details for Queensland are unavailable.

GENERAL INSURANCE, QUEENSLAND, 1981-82 (a)

Class of business	Premiums (b)	Claims incurred	Claims as proportion of premiums
	\$'000	\$'000	%
Fire etc.			
Fire	40,488	20,529	50.7
Crop (including hailstone)	763	671	87.9
Loss of profits	3,189	3,092	97.0
Houseowners' and householders'	70,258	30,579	43.5
Contractors' all risks	5,884	4,368	74.2
Marine hull			
Private pleasure craft	3,861	3,000	77.7
Other	4,050	7,712	190.4
Marine cargo	8,081	4,956	61.3
Motor vehicle			
Comprehensive (including motor cycles)	140,545	105,608	75.1
Compulsory third party (motor vehicles)	n.p.	n.p.	n.p.
Employers' liability	123,835	129,921	104.9
Public liability	12,386	5,099	41.2
Product liability	462	182	39.4
Professional indemnity	877	267	30.4
Other business			
Personal accident	8,393	4,289	51.1
Boiler, engineering, and machine breakdown	6,680	3,874	58.0
Travel (including baggage)	3,859	1,740	45.1
Burglary	3,154	1,876	59.5
Other	n.p.	n.p.	n.p.
Total	556,765	435,418	78.2

(a) This table should not be construed as a profit and loss account as it contains selected items of statistics only. charges amounting to \$34,410(000) paid to Fire Brigade Boards etc. and stamp duty.

(b) Excluding fire service

4 COMPANIES

Legislation

Companies in Queensland are regulated by the Commissioner for Corporate Affairs under the *Companies Act* 1961–1981. Any partnership or association of more than 20 persons formed for the purpose of profit or gain is required to incorporate under the Act. The Governor in Council may proclaim that a profession or calling which is not normally carried out by a corporation may be carried out by a partnership of no more than 100 persons. Any corporation desiring to carry on business in Queensland, but which was incorporated outside the State, is required to register.

The *Company Take-overs Act* 1979 was introduced by the Queensland Government for the purpose of controlling take-overs of Queensland incorporated companies and came into operation on 27 November 1979.

Queensland, New South Wales, Victoria, and Western Australia entered into an Interstate Corporate Affairs Agreement which is the basis for the National Companies and Securities legislation package covering all States and Territories by mutual agreement and became operative from 1 July 1982. Companies not incorporated in Queensland but registered under the terms of the Agreement are regarded as 'recognised' companies. The regulation and control of recognised companies, i.e. those incorporated in one of the States and operating in any of the others, is vested in the Commissioner for Corporate Affairs in the State of incorporation.

All companies are incorporated or registered as public companies unless they meet the requirements of proprietary companies. Proprietary companies are those which obtain their capital from private sources, as distinct from the general public. Previously, proprietary companies were allowed certain exemptions in respect of their reporting, accounts, audits, etc. Some of these exemptions have now been altered or abolished due to the changed emphasis of the proprietary company in the present business community. Many proprietary companies, for instance, are not capitalised from strictly private sources.

To encourage investment in the high risk ventures of mining and mineral exploration, the no-liability company was formulated. The principle involved is that the investor is under no liability to pay calls or amounts outstanding. Shares on which a call is unpaid are forfeited within 14 days after the call is payable.

In the case of unlimited companies there is no limit on the liability of members to meet debts. In this respect an unlimited company is no different from an unincorporated partnership. It does, however, have advantages in its legal status, the number of members, and the transferability of the interests of members. An unlimited company may be either public or proprietary.

5 CREDIT UNIONS

CREDIT UNIONS, QUEENSLAND

Particulars	1977–78	1978–79	1979–80	1980–81	1981–82	1982–83
	No.	No.	No.	No.	No.	No.
Societies	62	61	59	56	55	54
Members	134,849	150,825	172,257	195,476	217,782	238,782
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Income						
Interest received						
Loans to members	19,965	24,529	30,933	38,637	49,347	60,546
Other	1,280	2,776	3,396	4,334	6,291	9,991
Other income	1,338	2,166	2,316	2,928	4,128	4,564
Total income	22,583	29,471	36,645	45,900	59,769	75,100

CREDIT UNIONS, QUEENSLAND—*continued*

Particulars	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Expenditure						
Interest paid						
On deposits	13,303	17,678	21,838	27,929	37,142	49,464
Other	426	321	433	414	450	321
Administration	4,597	6,076	7,536	8,926	11,579	14,613
Loan protective insurance	382	468	508	554	626	755
Other expenditure	2,644	3,617	4,366	5,248	6,205	6,643
Total expenditure	21,352	28,160	34,682	43,071	56,002	71,796
Assets						
Loans to members	144,130	184,098	234,521	279,240	309,854	370,890
Other loans and investments	17,306	33,286	36,161	39,402	57,346	90,945
Cash on hand and at bank	4,519	3,596	3,315	5,058	5,801	5,549
Fixed assets	12,710	14,395	15,825	18,290	21,995	24,613
Other assets	479	970	1,489	2,616	3,713	6,763
Total assets	179,143	236,345	291,310	344,607	398,705	498,760
Liabilities						
Paid-up share capital	1,333	1,493	1,705	1,950	2,171	2,391
Reserve funds	3,329	4,660	6,497	9,923	16,172	20,201
Deposits	169,930	223,945	275,903	323,871	371,885	466,108
Other borrowings	3,667	5,271	5,743	6,657	5,495	6,169
Other liabilities	885	975	1,463	2,206	2,982	3,891
Total liabilities	179,143	236,345	291,310	344,607	398,705	498,760

Credit unions are registered in Queensland under the *Co-operative and Other Societies Act 1967*—1978 and operate on a co-operative basis predominantly by borrowing from and providing finance to their own members.

As the accounting periods of all credit unions are not uniform, the statistics in the table above relate to the accounting years which ended within the financial years shown.

6 INSTALMENT CREDIT FOR RETAIL SALES

Instalment credit for retail sales schemes are defined as those in which repayment is made by regular pre-determined instalments (such as hire purchase, time payment, and budget accounts) and personal loans made primarily to finance the sale of consumer commodities. A large proportion of total instalment credit is financed under hire purchase schemes.

INSTALMENT CREDIT FOR RETAIL SALES, QUEENSLAND (\$m)

Particulars	1977-78	1978-79 (a)	1979-80 (a)	1980-81 (a)	1981-82 (a)	1982-83 (a)
HIRE PURCHASE						
Amount financed (b)						
Motor vehicles	142.4	148.4	138.7	165.8	210.9	202.1
Household and personal goods	35.8	28.2	31.0	36.3	40.6	36.3
Total	178.2	176.5	169.7	202.1	251.5	238.4
OTHER INSTALMENT CREDIT						
Amount financed (b)						
Motor vehicles	40.5	45.2	47.3	56.5	66.8	59.2
Household and personal goods	41.2	41.8	42.4	45.1	49.3	63.7
Total	81.7	87.1	89.6	101.6	116.1	122.9

INSTALMENT CREDIT FOR RETAIL SALES, QUEENSLAND—continued
(\$m)

Particulars	1977-78	1978-79 (a)	1979-80 (a)	1980-81 (a)	1981-82 (a)	1982-83 (a)
TOTAL INSTALMENT CREDIT						
Amount financed (b)						
Motor vehicles	182.9	193.6	185.9	222.3	277.7	261.3
Household and personal goods	77.0	70.0	73.4	81.4	89.9	99.9
Total	259.9	263.6	259.3	303.6	367.5	361.3
Cash collections and other liquidations (c)	354.2	369.6	371.7	398.5	r 447.2	524.4
Balances outstanding at end of year (c)	488.6	504.9	508.1	554.1	708.9	764.1

(a) See text below concerning comparability.
insurance.

(b) Excluding hiring charges and insurance.

(c) Including hiring charges and insurance.

In Queensland, *The Hire-purchase Act of 1959* regulates the rights and duties of parties to hire purchase agreements. Each agreement must show the cash price of the goods and payments to be made, so that the hirer is aware of the difference between the cash price and the total amount he must pay. The Act requires that a minimum deposit of 10 per cent of the cash price shall be paid in cash or in goods or partly in cash and partly in goods. Charges are regulated under the *Money Lenders Act 1916-1979*.

Details of hire purchase and other instalment credit provided by businesses other than banks, credit unions, and insurance companies are shown in the next table. Credit transactions to finance the sale of land and property, property improvement, travel, repair services, and rental or leasing of consumer commodities are excluded. Financing of producer type goods such as plant and machinery and commercial motor vehicles is also excluded to ensure as far as possible that the series is an indicator of consumer credit.

Because of a change in the size criteria used to select finance companies for inclusion in this series, figures from 1978-79 are not strictly comparable with those for earlier years. For further details readers are referred to the ABS publication *Instalment Credit for Retail Sales* (Catalogue No. 5631.0) (October 1978 issue).

7 FINANCE COMPANIES

Details of the operations of finance companies are given in the next table. Because of changes in coverage and in the size criteria used to select finance companies for inclusion in this series, the figures from 1978-79 are not strictly comparable with those for earlier years. For further details readers are referred to the ABS publication *Finance Companies* (Catalogue No. 5614.0) (October 1978 issue).

FINANCE COMPANIES (a): LENDING OPERATIONS, QUEENSLAND
(\$m)

Particulars	1977-78	1978-79 (b)	1979-80 (b)	1980-81 (b)	1981-82 (b)	1982-83 (b)
<i>Amount financed during year</i>	1,370.9	1,609.7	1,774.1	2,472.4	r 2,863.5	2,678.2
Instalment credit for retail sales (c)	234.5	241.2	235.6	280.4	r 344.2	336.8
Wholesale finance (d)	588.3	711.7	772.1	953.6	1,087.4	1,022.5
Personal loans	107.5	133.9	145.6	170.9	172.4	178.3
Housing loans	210.8	247.5	301.5	546.8	r 639.8	456.7
Other consumer and commercial loans	229.9	275.3	319.3	520.8	r 619.7	683.8
<i>Balances outstanding at end of year (e)</i>	1,950.9	2,084.3	2,226.4	2,795.7	r 3,565.5	3,689.2
Instalment credit for retail sales (c)	474.0	493.1	496.0	541.5	696.4	751.0
Wholesale finance (d)	149.6	183.5	196.9	213.8	254.8	218.1
Personal loans	164.0	194.0	228.2	287.1	341.0	360.2
Housing loans	622.9	658.4	706.0	1,010.1	r 1,293.1	1,292.0
Other consumer and commercial loans	540.3	555.3	599.4	743.3	r 980.2	1,068.0

FINANCE COMPANIES (a): LENDING OPERATIONS, QUEENSLAND—continued
(\\$m)

Particulars	1977-78	1978-79 (b)	1979-80 (b)	1980-81 (b)	1981-82 (b)	1982-83 (b)
<i>Collections and liquidations during year (e)</i>	1,676.9	1,926.7	2,102.1	2,530.3	r 2,948.1	3,465.6
Instalment credit for retail sales (c)	325.5	343.5	347.7	374.0	r 420.9	498.6
Wholesale finance (d)	597.4	696.9	779.4	961.1	1,068.9	1,084.9
Personal loans	122.8	158.9	182.0	181.5	225.8	268.3
Housing loans	297.2	352.0	388.8	490.7	r 688.5	775.5
Other consumer and commercial loans	334.0	375.4	404.3	523.0	r 544.1	838.3

(a) See text below.

(b) See text preceding table concerning comparability.

(c) Included in the instalment credit for retail sales

statistics shown on pages 427 and 428.

(d) Relating mainly to the financing of motor vehicle dealers' stocks held under bailment or floor plan schemes. Including factoring.

(e) Including hiring charges and insurance.

Statistics in this section relate to finance companies which are defined as incorporated companies engaged mainly in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: hire purchase and other instalment credit for retail sales, wholesale finance, housing, other consumer and commercial loans, and factoring. In general, companies which are engaged both in financing and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above and/or a major proportion of their income is derived from such assets. The financing transactions and liquidity placements of companies frequently referred to as 'Merchant Banks' are excluded from July 1978.

8 STOCK MARKET

Details of turnover on the Brisbane Stock Exchange are shown for the six years ended 1982-83 in the next table. Total turnover for 1982-83 was 9.2 per cent higher than the previous year's figure.

TURNOVER ON BRISBANE STOCK EXCHANGE
(Source: Brisbane Stock Exchange)
(\$'000)

Year	Industrial shares and debentures	Mining shares	Oil shares	Government loans	Total
1977-78	54,635	29,623	15,451	8,621	108,330
1978-79	67,579	40,440	22,668	8,986	139,673
1979-80	134,988	199,048	92,773	6,889	433,698
1980-81	186,064	164,510	139,963	2,614	493,150
1981-82	135,427	54,451	56,170	5,381	251,429
1982-83	123,038	98,899	44,084	8,644	274,664

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Central Office Publications

Banking (5605.0) (*quarterly*)

Finance Companies: Assets, Liabilities, Income and Expenditure (5616.0) (*annual*)

Credit Unions: Assets, Liabilities, Income and Expenditure (5618.0) (*annual*)

General Insurance (5620.0) (*annual*)

Life Insurance (5621.0) (*monthly*)

Instalment Credit for Retail Sales (5631.0) (*monthly*)

Permanent Building Societies: Assets, Liabilities, Income and Expenditure (5632.0) (*annual*)

Chapter 24

MISCELLANEOUS

This chapter comprises statistics and other information which are not directly related to the subjects covered in the preceding chapters and which it is convenient to assemble in separate sections as follows: Internal Trade, Value of Agricultural Commodity Production, Tourism, Household Surveys, and Energy and Resources.

1 INTERNAL TRADE

In terms of trade internal to Queensland, extensive statistics of retail trade have been collected and published over many years. These statistics have been compiled on the basis of full censuses at periodic intervals from 1947–48, supplemented during the intervening periods by sample surveys. The coverage of internal trade was expanded in 1968–69 by the introduction of a similar census of wholesale trade.

Retail Trade

Census of Retail Establishments

The statistics in this section relate to retail establishments throughout Queensland and the value of their retail sales of goods.

In 1968–69 the Census of Retail Trade and Selected Services was conducted on an integrated basis with the first full Census of Wholesale Trade and also Censuses of Mining, Manufacturing, and Electricity and Gas Production and Distribution. A complete description of the meaning and purpose of the integrated economic censuses, the standardisation of census units, classification, and concepts was provided in the 1970 *Year Book*.

An abridged Census of Retail Trade and Selected Services was undertaken in 1973–74, primarily to provide census data to enable a new sample of retail establishments to be selected for the quarterly Surveys of Retail Establishments.

The 1979–80 Retail Census was the eighth retail census since 1948 and the third conducted throughout Australia as part of the ABS program of integrated economic data collections. The scope of the 1979–80 Retail Census included all establishments classified to Sub-division 48 (Retail Trade) and 'selected service' classes from Division L (Recreation, Personal and Other Services) of the Australian Standard Industrial Classification (ASIC) 1978 edition. From 1977–78 the 1978 edition of ASIC replaced the preliminary edition which had been in use since the 1968–69 census. In general, the impact of the change in industrial classification for the retail and selected services industries included in the census was minimal. The definition of retail trade adopted in the 1979–80 Retail Census was the same as that used in previous retail censuses, i.e. the sale of new and used goods to the final consumer for household and personal purposes. To conform with this definition, sales of: building materials and builders' hardware and supplies; grain, feed, fertilisers, and agricultural supplies; business machines and commercial refrigerators; tractors and agricultural machinery and implements; and earth moving equipment were not treated as retail sales. Where the sales of these commodities were reported by retailers they were included in the census tabulations with wholesale sales.

In the 1979-80 Retail Census the full range of census data was collected from all establishments except a small group which was only required to provide a restricted range of data. This group comprised bread and milk vendors and all single-establishment enterprises with census year turnover of less than \$50,000, except hotels and accommodation establishments. Details of the census are shown in the following table.

RETAIL ESTABLISHMENTS (a), QUEENSLAND, 1979-80

Industry group	Establishments (b)	Persons employed (c)	Wages and salaries (d)	Retail sales	Wholesale sales and other operating revenue (e)	Turnover
	No.	No.	\$m	\$m	\$m	\$m
Department and general stores	145	14,290	92.0	509.0	38.5	547.6
Clothing, fabric, and furniture stores	2,509	11,354	68.1	550.9	9.6	560.5
Household appliance and hardware stores	1,244	6,131	40.8	382.0	43.6	425.6
Motor vehicle dealers, petrol, tyre retailers	4,363	28,172	202.4	2,047.4	762.0	2,809.5
Food stores	5,732	40,059	165.0	1,774.8	23.2	1,798.0
Other retailers	2,663	10,863	54.5	449.3	16.3	465.6
Total retail establishments	16,656	110,869	622.8	5,713.4	893.2	6,606.6
Motion picture theatres	113	983	6.3	5.3	20.2	25.5
Restaurants, hotels, and accommodation	2,977	30,777	176.8	559.8	321.0	880.8
Licensed clubs	529	4,229	30.2	90.3	31.8	122.2
Laundries and dry-cleaners	143	1,192	7.6	0.1	18.7	18.8
Hairstressing and beauty salons	298	1,709	9.9	1.3	21.1	22.4
Total selected service establishments	4,060	38,890	230.8	656.8	412.9	1,069.7
Total	20,716	149,759	853.7	6,370.2	1,306.0	7,676.2

(a) Excluding all bread and milk vendors and single-establishment enterprises with turnover of less than \$50,000, except for hotels and accommodation establishments. (b) At 30 June 1980. (c) At end of June 1980, including working proprietors but excluding unpaid helpers. (d) Excluding drawings of working proprietors. (e) Including repair and service revenue, hiring of consumer goods, takings from meals and accommodation, hairstressing, commission, and other income, except rent, interest, royalties, dividends, and sales of fixed tangible assets.

The next table shows a summary of operations of retail and selected service establishments by States for 1979-80.

RETAIL ESTABLISHMENTS (a), AUSTRALIA, 1979-80

State or Territory	Establishments (b)	Persons employed (c)	Wages and salaries (d)	Retail sales	Wholesale sales and other operating revenue (e)	Turnover
	No.	No.	\$m	\$m	\$m	\$m
New South Wales	48,753	375,487	2,363.9	15,247.7	3,770.1	19,017.9
Victoria	35,845	250,537	1,493.5	11,179.6	3,101.1	14,280.7
Queensland	20,716	149,759	853.7	6,370.2	1,306.0	7,676.2
South Australia	11,751	90,332	527.0	3,585.8	705.5	4,291.3
Western Australia	11,571	87,204	511.9	3,707.7	860.4	4,568.1
Tasmania	4,165	28,016	169.7	1,200.7	186.3	1,387.0
Northern Territory	1,032	8,012	57.6	368.5	90.5	459.0
Australian Capital Territory	1,819	14,803	95.4	640.9	137.3	778.2
Australia	135,652	1,004,150	6,072.7	42,301.1	10,157.3	52,458.4

(a) to (e) See notes to previous table.

Survey of Retail Establishments

During the period between censuses, monthly and quarterly variations in the value of retail sales have been measured by means of sample surveys based on returns covering approximately 45 per cent of all retail sales in Australia.

The censuses provide for each State, and for divisions within each State, a classification of retail sales by type of store, commodity group, and value of sales. This made possible for subsequent sample surveys a detailed stratification of retail stores into the same classifications.

Because of their importance and relatively small numbers, the strata containing the large firms are fully enumerated at sample surveys. Other strata are sampled on a simple random basis. To keep the sample representative of current conditions, however, allowance is made for stores in the sample closing down or changing their type, and for new stores to be introduced into the sample. The regular complete censuses provide checks on the accuracy of the sample surveys.

RETAIL SALES (a) IN COMMODITY GROUPS, QUEENSLAND

Commodity group	Total sales			Sales per head of population (b)		
	1980-81	1981-82	1982-83	1980-81 r	1981-82	1982-83
	\$m	\$m	\$m	\$	\$	\$
Groceries	1,024.8	1,230.8	1,523.5	444.9	r 516.2	621.9
Butchers' meat .. .	348.2	378.9	372.6	151.2	158.9	152.1
Other food (c) .. .	548.8	622.2	677.0	238.3	r 261.0	276.3
Total food and groceries .. .	1,921.8	2,231.9	2,573.1	834.4	r 936.1	1,050.3
Beer, wine, and spirits .. .	697.1	810.2	903.9	302.7	339.8	369.0
Clothing and drapery .. .	660.3	767.2	775.1	286.7	r 321.8	316.4
Footwear .. .	109.6	125.5	123.3	47.6	52.6	50.3
Hardware, china, and glassware (d) .. .	215.5	244.3	269.8	93.6	r 102.5	110.1
Electrical goods (e) .. .	408.0	482.7	480.8	177.1	202.4	196.3
Furniture and floor coverings .. .	273.0	305.6	278.4	118.5	128.2	113.6
Chemists' goods .. .	259.0	285.0	257.1	112.5	119.5	104.9
Newspapers, books, and stationery .. .	218.1	235.1	241.3	94.7	98.6	98.5
Other goods (f) .. .	420.4	483.2	527.5	182.5	r 202.7	215.3
Total (excluding motor vehicles etc.)	5,182.8	5,970.7	6,430.7	2,250.3	r 2,504.2	2,625.0

(a) Survey figures for 1980-81 and 1981-82 are based on the 1973-74 Retail Census and figures for 1982-83 are based on the 1979-80 Retail Census. (b) Calculated on the basis of mean population for the year shown. (c) Including fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc. (d) Excluding building materials and builders' hardware and supplies, such as tools of trade, paint, etc. (e) Including television and accessories, radios, musical instruments, domestic refrigerators, etc. (f) Including tobacco, cigarettes, sporting goods, etc., but excluding grain and produce, and business machines.

Seasonality of Retail Sales—Quarterly estimates based on a sample survey, see above, are made of the value of retail sales. These indicate a seasonal variation in the sales of most commodities. The increase in business due to Christmas shopping is discernible in December quarter figures which are generally about 10 per cent higher than the average of all quarters.

RETAIL SALES IN COMMODITY GROUPS, QUARTERLY, QUEENSLAND (\$m)

Commodity group					September quarter	December quarter	March quarter	June quarter	Year
Groceries	1980-81	237.6	273.6	251.0	262.6	1,024.8			
	1981-82	282.3	322.3	297.8	328.4	1,230.8			
	1982-83	353.0	397.3	380.1	393.1	1,523.5			
Butchers' meat	1980-81	82.2	91.8	84.8	89.4	348.2			
	1981-82	94.9	97.1	90.7	96.2	378.9			
	1982-83	98.3	97.9	92.1	84.3	372.6			
Other foods (a)	1980-81	124.0	140.6	139.7	144.5	548.8			
	1981-82	146.0	161.2	158.1	156.9	622.2			
	1982-83	162.7	176.5	176.4	161.4	677.0			
Beer, wine, and spirits	1980-81	161.8	189.6	170.0	175.7	697.1			
	1981-82	187.4	222.0	197.8	203.0	810.2			
	1982-83	217.5	248.8	217.1	220.5	903.9			

RETAIL SALES IN COMMODITY GROUPS, QUARTERLY, QUEENSLAND—*continued*
(\$m)

Commodity group			September quarter	December quarter	March quarter	June quarter	Year
Clothing and drapery ..	1980-81		161.1	183.5	134.0	181.7	660.3
	1981-82		185.3	219.2	162.4	200.3	767.2
	1982-83		180.5	223.7	172.5	198.4	775.1
Footwear	1980-81		26.4	28.1	24.7	30.4	109.6
	1981-82		30.8	32.3	27.9	34.5	125.5
	1982-83		30.9	31.2	27.2	34.0	123.3
Hardware, china, and glass- ware (b)	1980-81		46.4	68.7	47.8	52.6	215.5
	1981-82		53.3	79.6	53.8	57.6	244.3
	1982-83		62.8	88.3	62.7	56.0	269.8
Electrical goods (c)	1980-81		89.0	118.0	97.9	103.1	408.0
	1981-82		112.0	138.6	111.6	120.5	482.7
	1982-83		112.4	137.4	114.5	116.5	480.8
Furniture and floor coverings	1980-81		65.3	72.1	62.4	73.2	273.0
	1981-82		76.2	84.2	68.5	76.7	305.6
	1982-83		73.4	77.1	61.1	66.8	278.4
Chemists' goods	1980-81		63.6	72.3	58.6	64.5	259.0
	1981-82		67.7	78.3	65.8	73.2	285.0
	1982-83		71.9	65.9	53.7	65.6	257.1
Newspapers, books, and stationery	1980-81		47.4	64.1	52.9	53.7	218.1
	1981-82		55.8	70.7	54.5	54.1	235.1
	1982-83		53.0	72.2	58.9	57.2	241.3
Other goods (d)	1980-81		97.6	120.0	96.0	106.8	420.4
	1981-82		109.6	137.9	110.7	125.0	483.2
	1982-83		132.0	154.2	112.6	128.7	527.5
Total (excluding motor vehicles etc.)	1980-81		1,202.4	1,422.4	1,219.8	1,338.2	5,182.8
	1981-82		1,401.3	1,643.4	1,399.6	1,526.4	5,970.7
	1982-83		1,548.4	1,770.4	1,528.8	1,583.1	6,430.7

(a) to (d) See notes (c) to (f) to previous table.

Wholesale Trade**Wholesale Trade Survey**

The ABS defines wholesale trade enterprises as those enterprises engaged in the resale (as agents or principals) of new or used goods to retailers or other wholesalers or to institutional (including government), professional, or other business users (including farmers and builders).

In 1981-82 the ABS conducted a Wholesale Trade Survey in which information was collected from a representative sample of wholesale establishments including import and export agents, commission agents, manufacturers' sales branches, petroleum product distributors, co-operatives, and marketing boards. Approximately 15,000 establishments were approached throughout Australia.

Details from the Wholesale Trade Survey (Australian figures only) were released in March 1984 in the ABS publication *Wholesale Establishments, Details of Operations by Industry Class* (Catalogue No. 8638.0).

2 VALUE OF AGRICULTURAL COMMODITY PRODUCTION

This section summarises the gross value of Queensland's agricultural commodities produced, to provide an indication of their relative importance when compared with the overall production of other industries. More detailed information concerning individual crops etc. is shown in the appropriate sections of earlier chapters. The 1981 Review of Commonwealth Functions determined that a number of statistical collections be terminated, including values of forestry, fishing, and hunting which were previously included in the following tables.

Gross Value of Commodities Produced

Gross value of commodities produced is the value placed on recorded commodity production at the wholesale prices realised in the market place. In general, the market place is the metropolitan market in each State. In cases where commodities are consumed locally, or where they become raw material for secondary industry, these points are presumed to be the market place. The gross value includes costs of containers, transport costs to markets, and associated selling expenses. After making allowance for these costs, local value of commodity production results, i.e. the value at the place of production.

GROSS VALUE OF AGRICULTURAL COMMODITIES, QUEENSLAND
(\$'000)

Commodity	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83 <i>p</i>
Crops						
Cereals for grain	139,253	382,063	267,500	265,728	437,043	311,103
Hay	14,314	18,783	18,638	23,172	23,815	30,578
Sugar cane	410,737	383,121	529,492	772,486	578,317	489,882
Tobacco	28,361	29,568	29,857	32,334	36,125	35,477
Fruit (including grapes)	68,980	83,233	81,346	93,664	109,164	112,537
Vegetables	69,864	81,015	92,315	127,282	145,206	173,630
All other crops	93,111	119,499	110,110	137,471	142,640	125,754
Total crops	824,619	1,097,281	1,129,259	1,452,137	1,472,311	1,278,961
Livestock disposals						
Cattle and calves						
Slaughtered	277,424	667,854	792,399	577,255	648,377	669,316
Other disposals (a)	15,253	92,638	28,010	9,878	43,132	- 31,586
<i>Total</i>	<i>292,677</i>	<i>760,492</i>	<i>820,409</i>	<i>587,133</i>	<i>691,509</i>	<i>637,729</i>
Sheep and lambs						
Slaughtered	9,291	15,670	20,518	20,833	20,119	17,349
Other disposals (a)	- 1,931	6,421	10,296	- 8,652	- 5,137	- 4,405
<i>Total</i>	<i>7,360</i>	<i>22,092</i>	<i>30,813</i>	<i>12,181</i>	<i>14,982</i>	<i>12,944</i>
Pigs						
Slaughtered	44,232	53,076	71,163	68,416	83,166	84,562
Other disposals (a)	- 687	456	596	265	718	1,178
<i>Total</i>	<i>43,545</i>	<i>53,532</i>	<i>71,758</i>	<i>68,680</i>	<i>83,884</i>	<i>85,740</i>
Poultry						
Slaughtered	28,563	32,252	42,073	43,709	41,904	51,582
Other disposals (a)	64	29	34	17	42	4
<i>Total</i>	<i>28,627</i>	<i>32,281</i>	<i>42,107</i>	<i>43,726</i>	<i>41,946</i>	<i>51,586</i>
Total livestock disposals	372,210	868,396	965,088	711,720	832,322	788,000
Livestock products						
Wool						
Shorn and dead	99,966	120,846	131,640	113,277	146,004	133,227
Fellmongered	369	248	139	-	-	-
Exported on skins	6,554	6,334	6,775	3,693	4,825	3,526
<i>Total</i>	<i>106,889</i>	<i>127,428</i>	<i>138,554</i>	<i>116,970</i>	<i>150,829</i>	<i>136,753</i>

GROSS VALUE OF AGRICULTURAL COMMODITIES, QUEENSLAND—continued
(\\$'000)

Commodity	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83 <i>p</i>
Livestock products-- <i>continued</i>						
Dairy products						
Whole milk used for						
Butter	5,286	6,582	4,124	} 36,000	44,843	47,451
Cheese	6,672	8,659	9,019			
Processed milk products ..	5,931	8,048	8,027			
Human consumption and other purposes	53,232	55,249	58,782	60,401	76,857	88,442
Total	71,121	78,538	79,952	96,401	121,700	135,893
Eggs	31,162	33,847	37,610	32,237	33,227	38,840
Honey	1,305	1,737	1,980	1,781	2,106	2,619
Beeswax	111	154	175	189	234	235
Total livestock products ..	210,589	241,704	258,270	247,578	308,096	314,341
Total agriculture	1,407,418	2,207,381	2,352,617	2,411,436	2,612,728	2,381,301

(a) Net exports (overseas and interstate) of livestock.

Local Value of Production

Details of the local values of agricultural commodities produced are shown in the next table. As mentioned earlier, the local value represents the gross value of commodities after deduction of marketing expenses. The table shows the gross values, the deductions for marketing expenses, and the resultant local values for each group of commodity production.

GROSS AND LOCAL VALUES OF AGRICULTURAL COMMODITIES PRODUCED, QUEENSLAND, 1982-83 *p*
(\\$'000)

Particulars	Crops	Livestock disposals	Livestock products	Total agriculture
Gross value of agricultural commodities produced	1,278,961	788,000	314,341	2,381,301
Costs of marketing	142,745	61,707	14,664	219,115
Local value of agricultural commodities produced	1,136,217	726,293	299,677	2,162,186

3 TOURISM

Queensland has figured prominently in the development of tourism in Australia and it has emerged as one of the State's most valuable industries.

Recognition is given at government level of the importance of training personnel for the tourist industry. To promote interest in training, the Queensland Tourist and Travel Corporation awards a four-year scholarship in the food service and tourism management course at the Queensland Agricultural College at Lawes. The Corporation has also introduced a cadet training scheme for junior travel consultants.

The State is fortunate in possessing an ideal combination for tourist development—a climate which appeals greatly to holiday-makers and one of the finest array of natural attractions in Australia: the Great Barrier Reef and islands, hundreds of kilometres of beaches, mountain scenic spots, national parks, the tropical north, the Darling Downs, and the inland.

Greatly increased tourist promotion, more efficient transport services, major highway improvements, and the provision of new and better resort and accommodation facilities in recent

years have all contributed to a great increase in tourism, which is apparent not only along the coastline from Coolangatta to Cooktown but also in many inland centres.

Principal Resorts

Brisbane, the Capital City, is a suitable headquarters from which to undertake a Queensland holiday. The City itself has a great deal to offer visitors in period and contemporary architecture, sub-tropical parks and gardens, tropical fruit plantations, and riverside scenic spots, and provides access to the islands of nearby Moreton Bay.

Road tours climb the Great Dividing Range to the 'Garden City' of Toowoomba, the centre of Queensland's wheat area, and also serve the Gold and Sunshine Coast beaches and surrounding areas.

The Gold Coast is Australia's largest and most popular tourist area. Capital investment on buildings in the area during the 10 years to 1982-83 is estimated to have been about \$1,443m. First class restaurants and cabarets ensure a variety of evening entertainment. This 32 km of beach development provides excellent amenities for surfing, water skiing, fishing, cruising, and a wide variety of other sporting activities. The Gold Coast also has several beautiful mountain attractions behind it and these are easily accessible by road.

The Great Barrier Reef (see page 24) and several of the tropical island resorts along it also enjoy an international reputation. In all, there are 22 resort islands along the Queensland coast. Rail, road, and air services operate from the south and north to the mainland 'gateway' points for island resorts. Transport across to the islands is then by launch and in several instances by aircraft. The waters of the Great Barrier Reef offer some of the best fishing in the world and this is being specially catered for in several centres. Cairns in particular has become an international centre for big-game fishing—notably for black marlin.

Cruises by overseas vessels to tropical North Queensland and to Brisbane are popular. Local cruises operate out of Mackay, Shute Harbour, Townsville, Cairns, Gladstone, Rockhampton, Brisbane, and other coastal centres on day and extended trips.

The Sunshine Coast, Brisbane's near north coast, has experienced steady development in recent years and has earned a wide reputation as an ideal area for the family holiday. A coastal highway links Caloundra and Noosa, passing through other first-class beach resorts such as Mooloolaba, Alexandra Headland, Maroochydore, and Coolum Beach. The lush cane-fields of the Maroochy River Valley and Bli Bli, the peaks of the Glasshouse Mountains, and the beauty of sub-tropical rainforest in the mountainous national parks can be seen in short day tours. At Buderim (shortly at Yandina) Australia's only ginger manufacturer provides facilities for visitors to view the processing plant.

North of Noosa, unique coloured sand cliffs extend from Teewah to Double Island Point and rise in places to over 180 m. Close to the coast, the tidal saltwater lakes of the Noosa River and the freshwater Lake Cooloolo are surrounded by natural bushland where native wildflowers abound.

The motorist plays a vital role in the domestic tourist market, easily the largest market, and the northern parts of the State have become more important for tourism following the completion of the all-bitumen road from the southern border to Cairns. Numerous centres along this highway offer attractions to tourists. There are more than 400 camping and caravan parks in Queensland, many of them equal to the best in Australia. Cairns, the Atherton Tableland, Port Douglas, and Kuranda attract many visitors, many of whom now carry on to the historical town of Cooktown which is at the site where Captain Cook beached the *Endeavour* for repairs in 1770.

On current trends, inland resorts will play a more significant part in the future expansion of tourism. More than 30,000 tourists take advantage of conducted tours of Mount Isa Mines each year. The Carnarvon Ranges and the gem fields in the Emerald, Winton, and Eulo districts are other attractions away from the coastal strip. Tours embracing the coastal resorts and the inland to Mount Isa now figure in tourist planning in this State. Visits to outback sheep and cattle stations are adding variety to a Queensland holiday.

Queensland Tourist and Travel Corporation

The Queensland Tourist and Travel Corporation was formed on 1 August 1979 to take over the promotion and marketing of tourism for Queensland. A total staff of 280 is employed by the Corporation. The selling arm of the Corporation, which continues to be called the Queensland Government Tourist Bureau, is distributed in nine Queensland regional centres as well as in Newcastle, Sydney, Melbourne, Canberra, Adelaide, and Perth.

While the Bureau is the largest booking agency in the State, its collections from this activity reflect only a comparatively small proportion of the value of tourism to the State. The following information, made available by the Queensland Tourist and Travel Corporation, illustrates the increased spending on publicity and its boost in sales over the six years to 1982-83.

Year		Publicity \$'000	Total sales \$'000
1977-78	.. ..	740	14,385
1978-79	.. ..	740	15,508
1979-80	.. ..	1,317	r 18,509
1980-81	.. ..	1,336	r 21,900
1981-82	.. ..	1,666	24,734
1982-83	.. ..	2,041	28,670

The Corporation produces high quality publications promoting Queensland attractions and the Queensland Holiday Fair, the first of which was held in the Brisbane City Hall in August 1980, is now an annual event in Brisbane, Sydney, and Melbourne.

The publicity campaign is directed primarily at Australians seeing their own country first. In the overseas sector, publicity efforts are concentrated a good deal on New Zealand as this is easily Queensland's most lucrative overseas market. The potential of the American and Asian markets also has been recognised in the overseas publicity work in recent years.

The Corporation is playing a major role in encouraging international airlines to introduce new services direct to Queensland. Promotional visits by interstate and overseas journalists and travel agents are sponsored or assisted by the Corporation.

Activities are aimed essentially at persuading people to come to Queensland, and it is the responsibility of local interests to ensure that the tourist visits their area in preference to another. Thus, local publicity efforts are encouraged and the Corporation provides an annual subsidy of \$25,000 to each of the regional tourist associations for this purpose.

There has been a great improvement in accommodation facilities for tourists throughout the State in recent years. During 1982-83, 2 hotels were rebuilt, while rebuilding was commenced on 6 hotels, and extensive remodelling or extension of \$60,000 or more in each case was undertaken on a further 25 hotels.

Tourist Accommodation Census

To satisfy the needs of various private organisations and government departments concerned with the development and promotion of tourism in Australia, a Census of Tourist

Accommodation Establishments which identified and measured the amount, type, and location of tourist accommodation available throughout Australia was conducted for the year ended 30 June 1974. For census purposes, tourist accommodation establishments were defined as: (a) hotels, motels, guest houses, etc. which have short-term accommodation available to the general public and which provide breakfast; and (b) caravan parks and holiday flats which have short-term accommodation available to the general public. Short-term accommodation is defined as being for periods of less than two months. A summary of the information obtained from the census is shown in the 1977 *Year Book*.

The 1979-80 Census of Retail and Selected Service Establishments included tourist and certain types of non-tourist accommodation establishments. A summary of the information for accommodation establishments obtained from this census is shown in the next table.

SELECTED ACCOMMODATION ESTABLISHMENTS, QUEENSLAND, 1979-80

Type of establishment	Establishments (a)	Capacity			Total employment at 30 June (d)	Takings from accommodation
		Guest rooms etc. (b)	Bed spaces	Van sites (c)		
SHORT-TERM (e)						
	No.	No.	No.	No.	No.	\$'000
Licensed hotels	809	10,946	22,367	207	12,850	36,528
Motels etc.	558	11,279	31,660	873	4,300	55,028
Caravan parks	334	541	1,832	29,203	1,011	16,771
Total	1,701	22,766	55,859	30,283	18,161	108,327
LONG-TERM (f)						
	No.	No.	No.	No.	No.	\$'000
Caravan parks etc., n.e.c. (g)	147	75	337	10,815	465	8,822
Other establishments	294	7,842	10,947	167	2,131	10,911
Total	441	7,917	11,284	10,982	2,596	19,733
Total	2,142	30,683	67,143	41,265	20,757	128,060

(a) Operating at 30 June 1980. (b) Including cabins, units, and flats. (c) Including powered and unpowered sites, and on-site vans. (d) Including working proprietors. (e) Most guests staying less than 2 months. (f) Most guests staying 2 months or more. (g) Including long-term caravan parks, and short-term and long-term camping grounds without either facilities or powered sites.

Tourist Accommodation Surveys

In order to provide continuing and up-to-date statistics on the utilisation of available accommodation and to identify seasonal trends, a series of quarterly Accommodation Surveys was commenced in September 1975 to provide detail of occupancy levels. The scope of these surveys differed from the 1973-74 census in the exclusion of caravan parks and holiday flats until September 1977 when 'caravan parks' replaced the category 'hotels without facilities' collected previously. Further, only establishments predominantly providing short-term accommodation, i.e. most guests staying less than 2 months, are included in the surveys.

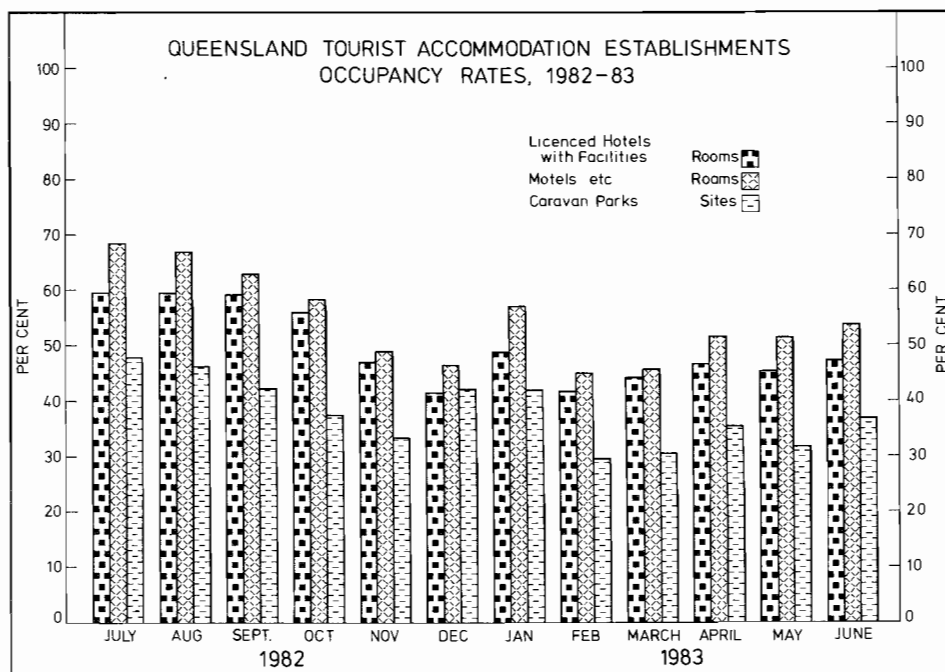
Occupancy rates from the quarterly surveys are shown in the following tables and diagram. Room occupancy rate refers to the proportion of guest rooms occupied in hotels, motels, etc. to the number of guest rooms available, expressed as a percentage. Site occupancy rate refers to the proportion of sites occupied by guests in caravan parks to the total caravan park capacity available during the survey period expressed as a percentage. Unoccupied on-site vans are treated as vacant sites.

The next table shows the capacity and room occupancy rates of licensed hotels, motels, etc. in the main tourist regions of the State.

LICENSED HOTELS, MOTELS, ETC. WITH FACILITIES (a): CAPACITY AND OCCUPANCY
IN PRINCIPAL TOURIST REGIONS, QUEENSLAND

Tourist region	Capacity (b)			Room occupancy		
	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
	No.	No.	No.	%	%	%
Brisbane Statistical Division	3,056	3,122	3,417	71.0	72.0	61.4
Gold Coast	3,155	3,588	4,409	65.7	58.3	49.2
Maroochy, Landsborough, Noosa ..	1,116	1,186	1,250	56.7	56.8	45.3
Bundaberg, Isis, Woongarra	415	425	465	54.7	56.6	52.3
Maryborough, Hervey Bay	379	463	630	48.7	47.5	40.8
Toowoomba, Warwick, Stanthorpe ..	627	708	705	60.2	61.2	57.0
Gladstone, Livingstone, Rockhampton	908	1,162	1,442	75.0	70.5	57.7
Mackay, Pioneer, Proserpine	1,385	1,490	1,840	68.3	67.5	62.7
Townsville	1,025	1,164	1,250	60.2	63.6	55.9
Cairns	1,071	1,411	1,585	71.1	62.5	54.8
Atherton, Cardwell, Douglas, Eamam,						
Johnstone, Mulgrave	666	755	814	48.9	47.8	42.8
North-West Statistical Division ..	361	366	392	53.5	51.6	49.8
Other	2,594	3,175	3,527	50.2	52.8	48.8
Total Queensland	16,758	19,015	21,726	62.7	61.0	53.2

(a) Licensed hotels, motels, private hotels, and guest houses with facilities, i.e. establishments which provide bath or shower and toilet in most guest rooms, and have breakfast available for guests. (b) Guest rooms at 30 June.



The next table shows the capacity and site occupancy rates of caravan parks in the main tourist regions of the State.

CARAVAN PARKS (a): CAPACITY AND OCCUPANCY IN PRINCIPAL TOURIST RESORTS, QUEENSLAND

Tourist region	Capacity (b)			Site occupancy		
	1980-81	1981-82	1982-83	1980-81	1981-82	1982-83
	No.	No.	No.	%	%	%
Brisbane Statistical Division	2,457	2,448	1,602	39.0	40.9	36.5
Gold Coast	3,520	3,596	3,215	57.5	54.5	49.9
Maroochy, Landsborough, Noosa ..	4,583	4,563	4,383	49.3	47.5	42.0
Bundaberg, Isis, Woongarra	1,593	1,617	1,615	22.3	32.5	33.3
Maryborough, Hervey Bay	2,007	2,157	2,397	34.0	41.5	40.8
Toowoomba, Warwick, Stanthorpe ..	639	675	537	28.2	30.1	27.8
Gladstone, Livingstone, Rockhampton	1,412	1,595	1,592	47.3	48.6	43.2
Mackay, Pioneer, Proserpine	1,534	1,680	1,279	48.5	56.8	57.3
Townsville	(c)	(c)	(c)	(c)	(c)	(c)
Cairns	1,013	1,027	1,027	70.2	74.4	65.1
Atherton, Cardwell, Douglas, Eacham, Johnstone, Mulgrave	3,601	3,869	3,974	28.6	31.2	31.0
North-West Statistical Division ..	512	565	640	25.9	33.9	36.7
Other	9,261	9,772	10,214	27.0	29.1	29.8
Total Queensland	32,132	33,564	32,475	38.6	40.3	38.1

(a) Caravan parks with facilities, i.e. establishments which provide powered sites for caravans, and toilet, shower, and laundry facilities for guests. (b) Sites at 30 June. (c) Not available separately. Included in 'other'

Takings from accommodation from the results of the 1982-83 quarterly surveys are shown in the next table.

TOURIST ACCOMMODATION ESTABLISHMENTS: TAKINGS FROM ACCOMMODATION, QUEENSLAND, 1982-83 (\$'000)

Period	Licensed hotels with facilities (a)	Motels etc. (a)	Total	Caravan parks
July	4,307	10,230	14,538	2,731
August	4,544	10,376	14,920	2,673
September	4,599	9,581	14,180	2,385
September quarter	13,450	30,188	43,638	7,790
October	4,711	9,679	14,390	2,158
November	3,634	7,635	11,269	1,865
December	3,325	7,615	10,941	2,479
December quarter	11,670	24,929	36,600	6,502
January	3,994	10,120	14,114	2,589
February	2,898	6,701	9,599	1,595
March	3,492	7,524	11,016	1,760
March quarter	10,384	24,345	34,729	5,944
April	3,819	8,538	12,357	2,002
May	3,826	8,763	12,590	1,870
June	3,697	8,912	12,609	2,106
June quarter	11,342	26,213	37,555	5,978
Total	46,846	105,675	152,522	26,214

(a) Providing bath or shower and toilet in most guest rooms.

4 HOUSEHOLD SURVEYS

A household survey as conducted by the ABS is, as the name implies, a method of obtaining statistical information direct from households. The survey differs from the other major

collection of the ABS from households, the Census of Population and Housing, in the following ways.

- (a) The survey is carried out at a *sample* of households while the Census collects information from all households.
- (b) Because a sample is used, a survey can be repeated much more frequently than the Census, which is carried out at five-yearly intervals.
- (c) The survey provides timely data with a degree of accuracy which generally enables data to be available at the national, State, and Capital City Statistical Division/Rest of State levels. The Census on the other hand produces data which is much less timely but which is available at a Collection District level. The Collection District is the area enumerated by an individual Census collector.
- (d) Survey information is collected by personal interview while Census results are obtained from a form completed by the householder.
- (e) While both the survey and the Census collect information about individuals, the survey enables detailed analyses of complex issues to be undertaken, whereas the Census form, of necessity, is restricted to topics requiring relatively simple answers.

The Sample

The household surveys of the ABS are based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc.) and non-private dwellings (hotels, motels, etc.) and cover about two-thirds of 1 per cent of the population of Australia. Interviewing at households randomly selected by means of scientific sampling techniques can generate results within specified standards of accuracy at considerable savings in costs and resources compared with the Census.

Interviewers employed on the surveys are carefully selected and specially trained to ensure efficiency in data collection and protection of the confidential information from householders.

Survey Topics

The Labour Force Survey was the first household survey conducted by the ABS in Australia. It was initiated in November 1960, and carried out on a quarterly basis until February 1978, when it became a monthly survey (see Chapter 12, Labour Force, Section 4).

In conjunction with the Labour Force Survey, the ABS carries out Supplementary Surveys on one or more topics during most months of the year. Many of the supplementaries are labour force orientated but topics covering demographic matters, health, education, and other social issues have been surveyed. A comprehensive list of surveys held (as well as published information) is available from the ABS on request.

On four occasions to date, monthly supplementary surveys have been specifically carried out on behalf of the Queensland Government. These were 'Employed Married Women in the Labour Force' (November 1979), 'Use of Health Services' (October 1980), 'Voluntary Participation in Welfare Services' (November 1982), and 'Care for the Aged' (October 1983). Results of the surveys were published in the ABS publications Catalogue Nos 6203.3, 4305.3, 4401.3, and 4306.3, respectively.

As the primary purpose of the monthly surveys is the collection of information on the labour force, there are limitations on the nature of the information which can be sought from householders on other topics. Nevertheless it is a useful vehicle for collecting timely information on a wide range of topics.

Since 1978-79, to satisfy the demand for information on significant social issues, Special Supplementary Surveys (S.S.S.) have been part of the household surveys program. They are conducted on a different sample from the monthly surveys and offer great flexibility in scope and

design and can accommodate a number of complex issues. Contents of the surveys conducted to date have been:

S.S.S. 1 (February–May 1979)

Sight, Hearing, and Dental Health of Children, Dental Health of Adults, Sight Problems and Use of Glasses by Adults, Employment Benefits, and Working Conditions

S.S.S. 2 (September–December 1979)

Income Distribution 1978–79, and Education Experience and Intentions

S.S.S. 3 (February–May 1981)

Handicapped Persons, Working Arrangements, and Night Work

S.S.S. 4 (March–May 1982)

Families and Alternative Working Arrangements

S.S.S. 5 (August–December 1982)

Educational Intentions, Trade Qualifications, Superannuation, Life Insurance, Income, and Housing

S.S.S. 6 (February 1983–January 1984)

Crime Victims, Health, Travel, and Tourism

Other major surveys have been Household Expenditure (1974–75 and 1975–76), a General Social Survey (1975), and an Australian Health Survey (1977–78). Published results of these surveys and the Special Supplementary Surveys are available from the ABS on request.

5 ENERGY AND RESOURCES

(Contributed by the Queensland Department of Mines)

Introduction

Queensland is a major producer and exporter of energy resources, yet is heavily reliant on imports of crude oil and oil products. The preponderance of proven coal reserves, relative to the known reserves of oil and natural gas, contrasts with the usage pattern for these fuels.

Energy reserves of coal are about one thousand times greater than total reserves of oil and natural gas, although coal and oil contribute about equally to the present energy needs of Queensland. The State has significant reserves of uranium ore and oil shale, but these resources are not currently utilised to meet energy requirements.

SUMMARY OF ENERGY PRODUCTION, CONSUMPTION, AND RESERVES, QUEENSLAND, 1982–83
(petajoules)

Source	Energy production	Energy consumption	Energy reserves
Fossil fuels			
Black coal	1,032	217	821,000
Natural gas	17	17	301
Oil	4	197	215
Oil shale			
Methane drainage			
Nuclear uranium	165		(a)
Bagasse	68	68	
Hydro-electric	2	2	
Wood (b)		1.1	

(a) Extensive. (b) Estimated.

Coal

With recoverable reserves of some 14,000m tonnes of coal, Queensland is a major coal producing and exporting State. Because coal is abundant and production costs are low it is the

major source for electricity generation and mineral processing. About three times as much coal is exported as is consumed in the State. Exports are primarily coking coal, which is used for steel manufacture and metallurgical applications. Most of the steaming coal produced is used locally for electricity generation and industrial boilers, with some exports.

Queensland coals are low in sulphur by world standards. Most contain less than 0.6 per cent sulphur, and some have sulphur levels as low as 0.23 per cent. The low sulphur level allows emissions from coal-fired plants to be kept within environmental quality guidelines by using bag filters and other relatively simple control measures.

The production and export of coking coal has undergone dynamic growth in the last 15 years. Until about 1963, coal production remained at a relatively stable level of about 2.6m tonnes a year, and was predominantly steaming coal for electricity generation, railways, and industrial use in south-east Queensland. The discovery, in the early 1960s, of major deposits of coking coal coincided with the expansion of the Japanese steel industry which required large amounts of metallurgical-grade coal. By 1967 coal production from major new mining ventures in central Queensland exceeded production from established mining areas in the West Moreton and Maryborough Districts of south-east Queensland. Since then coal production by the numerous small mines in south-east Queensland has increased only marginally and has been completely overshadowed by the growth in coal production in the Bowen and Callide Basins. Coal mines in central Queensland presently account for about 90 per cent of coal production in the State.

While present production of saleable coal amounts to about 35m tonnes a year, production could readily be expanded to about 50m tonnes a year. An upturn in world coal markets would also promote the development of a number of potential coal mines, such as those proposed at: Theodore, Enshman, Baralaba, Hail Creek, Nebo, Rolleston, Winchester South, and Wolfgang in central Queensland; Pentland in north Queensland; and Acland, Bowenville, Barakula, Brigalow, Chinchilla, Macalister, Millmerran, Taroom, and Wandoan in south-east Queensland. Resource evaluation and feasibility studies are well advanced for some of these projects.

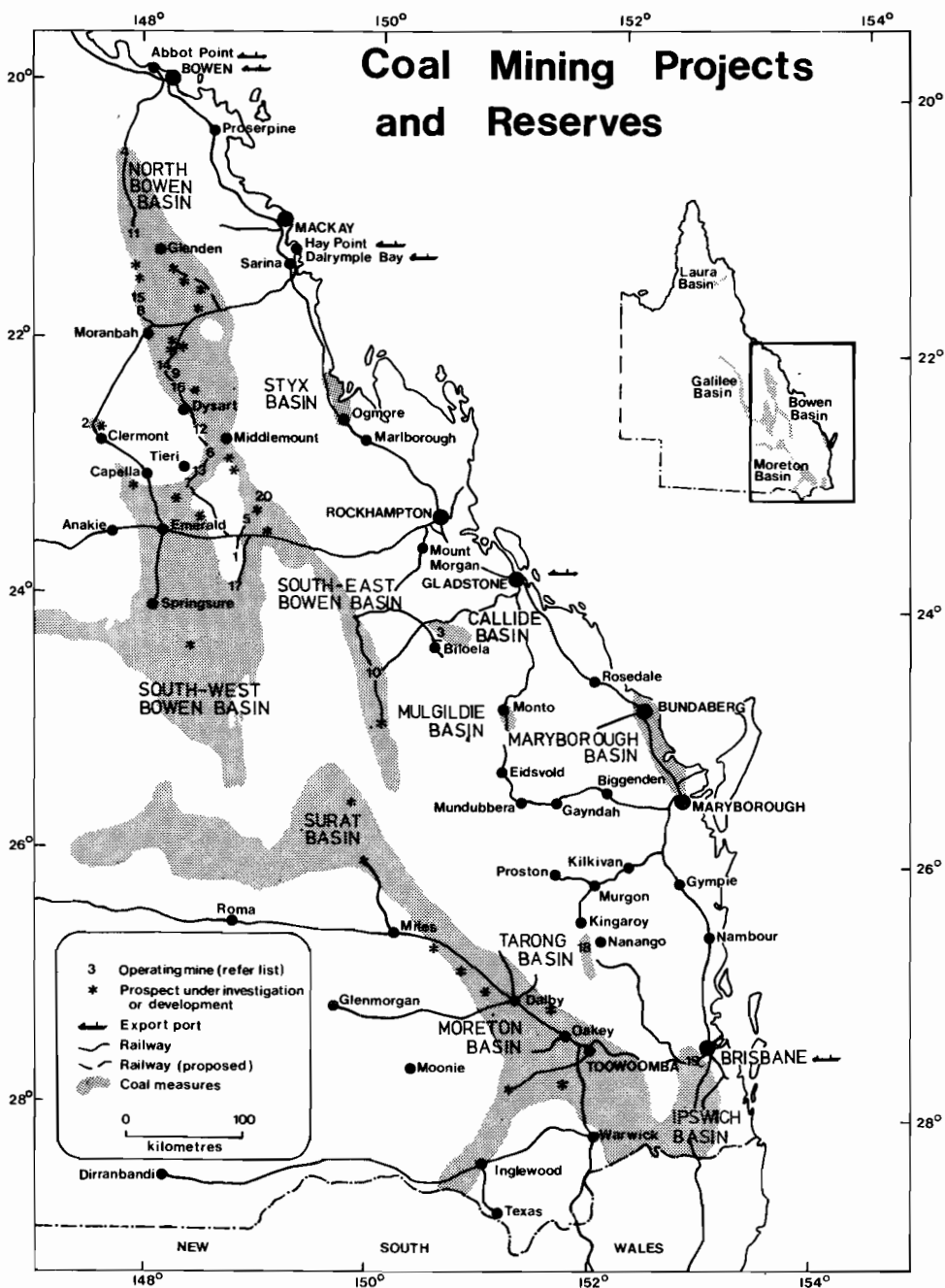
About 90 per cent of Queensland coal production is obtained from relatively shallow deposits by low-cost open-cut mining methods. A large share of *indicated coal reserves* are situated, however, at depths accessible only by underground mining. Coal resources within 60 metres of the surface, i.e. readily accessible to open-cut mining, account for about 45 per cent of measured reserves, but only 15 per cent of indicated reserves. Measured reserves accessible by open-cut mining are sufficient to maintain present production levels for about 100 years.

IN SITU COAL RESERVES, QUEENSLAND, AT 30 JUNE 1983
(million tonnes)

Coal basin	Total reserves (a)	
	Coking	Steaming
Bowen		
North	5,149	865
Central	7,892	6,513
South-East	1,225	1,604
South-West	—	425
Galilee	—	2,145
Surat-Moreton	—	2,970
Ipswich	—	490
Tarong	—	280
Callide	—	216
Mulgildie	—	20
Styx	—	4
Total Queensland	14,266	15,532

(a) The sum of measured and indicated reserves.

On the assumption that 90 per cent of open-cut coal and 50 per cent of underground coal are extracted by mining, and using existing experimental data (or otherwise an arbitrary figure of 65 per cent) for the recovery of coking coal after washing, recoverable reserves of coal based on measured and indicated reserves are: 5,560 million tonnes of coking coal; and 8,250 million tonnes of non-coking coal.



LOCAL CONSUMPTION AND EXPORTS OF COAL, QUEENSLAND
(million tonnes)

Year	Local consumption					Exports	Total
	Electricity generation	Metal mining and processing	Cement	Other industry	Total		
1977-78	4.540	1.043	0.264	0.183	6.030	20.501	26.531
1978-79	4.520	1.179	0.269	0.185	6.153	19.220	25.373
1979-80	4.882	1.256	0.270	0.221	6.629	21.875	28.504
1980-81	5.346	1.261	0.244	0.268	7.119	24.224	31.342
1981-82	5.653	1.201	0.332	0.312	7.498	24.990	32.488
1982-83	6.709	1.224	0.357	0.326	8.616	26.496	35.112

MAJOR COAL MINING PROJECTS (a) IN OPERATION OR UNDER CONSTRUCTION, QUEENSLAND, AT 30 JUNE 1983

Map reference No.	Mining area	Extraction method	Coal use	Annual production (million tonnes)
1	Blackwater	OC	C and S	4.2
2	Blair Athol	OC	S	0.1
3	Callide-Boundary Hill	OC	S	3.5
4	Collinsville	OC and UG	C and S	1.4
5	Curragh	OC	C and S	—
6	German Creek	OC and UG	C	2.3
7	Gregory	OC	C	2.0
8	Goonyella	OC	C	4.2
9	Harrow Creek	UG	C	0.2
10	Kianga-Moura	OC and UG	C and S	1.9
11	Newlands	OC	S	—
12	Norwich Park	OC	C	2.5
13	Oaky Creek	OC and UG	C and S	0.5
14	Peak Downs	OC	C	3.9
15	Riverside	OC	C	—
16	Saraji	OC	C	3.6
17	South Blackwater-Ballamoo-Cook	OC and UG	C and S	2.1
18	Tarong	OC	S	—
19	West Moreton	OC and UG	S	3.1
20	Yarrabee	OC	S	0.2

(a) Projects with annual production of 0.1m tonnes or more. A project may contain one or more mines.
UG Underground mining. C Coking coal. S Steaming coal.

OC Open-cut mining.

Electrical Power: Generation and Distribution

The bulk of electrical power used in Queensland (over 90 per cent) is produced from coal-fired steam turbine generating stations. Hydro-electric generating stations contribute about 5 per cent of the State's power requirements, or in the case of Wivenhoe Dam, will be used to store energy for peak demand periods. Gas turbine plants, powered by diesel fuel, are used as a back-up to provide power during peak demand periods, while some factories and mines use diesel-powered generator sets to provide their own power needs.

Power generating stations are linked to electricity consumers by a grid of high-voltage transmission lines. The main 275 kV lines carry power along the heavily populated coastal strip. Smaller branch lines transmit power inland and from regional generating centres. For isolated communities, separated from the main intrastate power distribution grid, electrical power is usually produced by diesel generator stations. Private power generation by factories and mines accounts for about 10 per cent of total State power requirements. Of particular significance is the 150 MW generating station operated by Mount Isa Mines Ltd which provides electrical power for the Mount Isa Mine, mineral processing, and the City of Mount Isa.

The intrastate grid has been steadily expanding in recent years, making cheap and reliable electricity supply available to many outback communities for the first time. More than 130,000

kilometres of high-voltage and low-voltage supply lines link consumers to electrical generating stations.

Distribution of power through the intrastate grid smoothes local load variations and allows generating stations to be utilised at optimal efficiency. The most efficient plants are used to provide for base load electricity demand, while smaller less-efficient plants and gas turbines are brought on-stream to meet peak demand loads. The Gladstone Power Station of 1,650 MW capacity is the base load 'work-horse' of the Queensland power generating system, providing over 60 per cent of the annual load. It is also the largest operating power station in Queensland, although it will soon be joined by the new Tarong Power Station (1,400 MW) and later by the Stanwell Power Station (1,400 MW).

Industrial and commercial consumers account for some 60 per cent of the electricity used in the State. Domestic consumers account for a major share (about 37.5 per cent) of electricity demand, while public lighting and electric trains account for less than 1 per cent of total electricity consumption. In the last two years, demand for electrical energy has grown significantly faster than the 7 per cent historical growth rate, primarily due to the operation of the Boyne Island aluminium smelter.

Planning and regulation of the electrical power industry in Queensland is carried out by the State Electricity Commission. Chapter 18, Manufacturing Industry, Section 5, contains detail of the structure of the organisation of the electrical supply industry.

Crude Oil

Commercial production of crude oil began in Australia in 1964 with the completion of the 300 kilometre oil pipeline from the Moonie oilfield (and other smaller fields) to the two major refineries in Brisbane. Production of crude oil and condensate from the area around Moonie is small, about 90 megalitres a year which is equivalent to only 1.5 per cent of the State's demand for all petroleum products. Remaining recoverable reserves of crude oil in the Alton, Bennett, Moonie, and other Bowen-Surat Basin oilfields are approximately 1,000 megalitres.

The crude oil supply has been significantly altered by the discovery of oil at Jackson in the Eromanga-Cooper Basin of south-west Queensland. A new 780 kilometre pipeline has recently been completed to carry oil from the Jackson field to Moonie for transport through the existing Moonie-Brisbane pipeline. This will provide 900 megalitres a year to Brisbane refineries (equivalent to about 15 per cent of the State's crude oil requirements). Recoverable reserves from the Jackson field are estimated to be 4,800 megalitres. Production from Jackson is expected to decline after a few years.

CRUDE OIL RESERVES, QUEENSLAND, AT 30 JUNE 1983

Field	Remaining recoverable reserves	
	Volume	Energy
	megalitres	petajoules
Alton	42	1.5
Bennett	1	—
Jackson	4,864	180.0
Moonie	462	17.6
Other fields	440	16.2
Total	5,809	215.3

Queensland has three oil refineries: the 45,000 barrels a day and 60,000 barrels a day refineries at the mouth of the Brisbane River; and a small 500 barrel a day refinery unit near Roma. Most of the crude oil feedstock for the two Brisbane refineries arrives by marine tanker from Bass Strait, Indonesia, and Saudi Arabia. The Brisbane refineries provide most of the State's requirements of refined petroleum products.

Production by Queensland refineries is sufficient to meet the State's entire demand for gasoline, but only provides about 77 per cent of the demand for diesel fuel and 25 per cent of the requirements for fuel oil. The concentration of agricultural, mining, and heavy construction activities is responsible for the State's unusually high consumption of diesel fuel, relative to the demand for gasoline and other petroleum products. Motor spirit (gasoline) and automotive diesel fuel account for about four-fifths of all petroleum fuels used. Large amounts of furnace fuel are used to meet industrial requirements, although consumption has been declining as major industrial plants convert to coal or other fuels. In addition to petroleum fuels used each year, amounting to some 5,400 megalitres, about 260 megalitres of lubricants, bitumen, and other non-fuel petroleum products are also used.

MAJOR PETROLEUM PRODUCTS CONSUMPTION, QUEENSLAND
(megalitres)

Year	LPG	Aviation gasoline	Motor spirit	Aviation turbine fuel	Kerosenes and heating oil	Automotive distillate	Industrial diesel fuel	Furnace fuel	Total major fuels
1977-78	85.5	23.4	2,210.5	297.2	55.9	1,250.4	114.1	1,005.8	5,042.8
1978-79	92.9	27.9	2,331.0	300.2	54.8	1,385.1	100.2	1,119.4	5,411.5
1979-80	103.7	25.0	2,361.0	328.5	44.9	1,490.4	104.4	1,115.6	5,614.5
1980-81	125.3	28.3	2,406.5	328.7	38.4	1,592.2	55.7	1,129.7	5,704.8
1981-82	131.1	29.1	2,585.9	369.4	36.5	1,828.9	49.3	924.1	5,954.3
1982-83	144.2	26.3	2,602.2	367.9	30.1	1,751.4	30.1	510.5	5,462.7

Natural and Liquefied Petroleum Gas

Natural gas comprises a relatively minor energy source in Queensland, accounting for only about 3 per cent of energy needs. Although Brisbane was the first Capital City in Australia to be supplied with natural gas (since December 1968), it plays a much smaller role in Queensland's energy consumption than it does in most other States. The present annual gas consumption in Queensland of 419 million cubic metres accounts for only 4 per cent of total Australian gas demand.

The gas pipeline to south-east Queensland taps some 22 small gas-producing fields near Roma. Gas is collected from the main producing areas at Roma, Kincora, and Silver Springs and brought to Wallumbilla via gathering pipelines. The gas is then transported from Wallumbilla to Brisbane through the 436 kilometre Roma-Brisbane pipeline.

Reticulated natural gas is presently only available within a limited area in the south-east, essentially restricted to Roma, Dalby, Toowoomba, Ipswich, Brisbane, Kingston, and Woodridge. The major consumer of natural gas in the State is a fertiliser plant at Gibson Island, Brisbane, which presently accounts for over 70 per cent of natural gas consumption. Gas is distributed for domestic use in southern Brisbane and Toowoomba by a franchised company. For domestic application in Queensland, natural gas is used primarily for hot water heating and cooking, with little usage for space heating.

Gas supplies for northern Brisbane are maintained by another franchised company. Until 31 December 1983 this company provided 'town gas' made by reforming of petroleum naphtha. The availability of additional reserves of natural gas has allowed the company to convert to reforming natural gas. The gas available in northern Brisbane has a substantially lower heating value than natural gas (18 megajoules per cubic metre as compared to 40.39 megajoules per cubic metre) so that gas appliances cannot be transferred across franchise areas without modification.

There is considerable potential for expansion of natural gas markets in Queensland should sufficient natural gas reserves be proven and made available by construction of a new pipeline. A proposal has been made for a \$100m project to pipe natural gas to Gladstone from untapped gasfields in the Denison Trough, north of Roma. Recent gas discoveries in the Denison Trough, the Surat-Bowen Basin, and the Eromanga-Cooper Basin near the Queensland-South

Australian border, have brought total recoverable gas reserves in the State up to 13,837 million cubic metres at 31 December 1983.

Liquefied petroleum gas (LPG) is produced as a by-product of petroleum refining. The main constituents of LPG, propane and butane, are produced during catalytic cracking of heavy hydro-carbons. About 45,000 tonnes a year of LPG are produced by the two refineries in Brisbane. This supply is supplemented by gas liquids from the Bass Strait fields, amounting to about 30,000 tonnes a year.

LPG can be used as a substitute for natural gas by consumers outside the limited corridor served by the Roma-Brisbane gas pipeline. Some 3,000 tonnes a year of LPG are used for the production of reformed town gas in Cairns, Mackay, and Bundaberg. LPG can be readily stored in liquefied form in steel pressure tanks, making it convenient to use for cooking in isolated communities, and for outdoor activities, as well as an automotive fuel for cars and light trucks. LPG is much more expensive than natural gas, roughly two to three times the price, but is significantly cheaper than gasoline or diesel fuel which provides an incentive for operators of taxi fleets and other high-kilometrage vehicles to convert to LPG. Use of LPG as an automotive fuel presently accounts for about one-quarter of total LPG consumption in Queensland.

LPG is also a minor constituent of the natural gas in Queensland and the planned construction of LPG separation plants at Kincora and Wallumbilla will provide a supplementary source of about 32,000 tonnes a year. The two LPG extraction plants will allow demand for LPG in 1985 to be met entirely by sources within the State.

State-wide consumption of LPG for all applications, including use as an automotive fuel, is only about 150 megalitres a year. In energy terms this is equivalent to less than one-quarter of natural gas consumption in Queensland.

NATURAL GAS RESERVES, QUEENSLAND, AT 30 JUNE 1983

Field	Remaining recoverable reserves	
	Volume	Energy
	million cubic metres	petajoules
Connected to Roma-Brisbane pipeline	1,993	78.7
Not connected to Roma-Brisbane pipeline		
Surat-Bowen Basins	2,713	107.2
Adavale Basin	578	22.8
Cooper Basin	2,330	92.0
Total	7,614	300.7

Uranium

Uranium has never been extensively mined and the State's total reserves of uranium oxide of 26,000 tonnes are relatively small. The only uranium mining operation in Queensland was at Mary Kathleen, about 50 kilometres south-east of Mount Isa, from 1958 until 1963. The mine was re-opened in 1975 in response to increased demand and higher prices for uranium on overseas markets. Although the mine was relatively small in scale, its production of uranium accounted for more than one-third of the State's energy exports. The depletion of economic reserves of ore led to the Mary Kathleen mine being closed in 1982. Other deposits of uranium ore are situated at Ben Lomond, Westmoreland, and Georgetown.

Oil Shale

Oil shales are fine-grained sedimentary rocks composed primarily of sand, limestone, or clay particles whose pores contain kerogen. In Queensland oil shales, kerogen is derived primarily from algae deposited in ancient seas and lakes. When oil shale is heated to about 500

degrees Celsius in the absence of oxygen, the kerogen decomposes, yielding a hydro-carbon oil. This oil can be upgraded by hydro-treating, yielding a synthetic crude oil whose sulphur and nitrogen content meets existing refinery specifications.

Queensland has a number of oil shale deposits that are being evaluated for commercial development. Among these are the Rundle, Stuart, Yaamba, Nagoorin, Nagoorin South, Duaringa, and Lowmead deposits in central Queensland, and the Condor deposit in northern Queensland. These are all relatively accessible to existing port facilities (at Gladstone and Mackay), railroads, and towns. Major feasibility and engineering studies are in progress on the Rundle and Stuart deposits, which are situated near Gladstone, the Yaamba deposit to the north of Rockhampton, and the Condor deposit near Proserpine.

Condor is the largest oil shale deposit in Australia, containing an estimated 1,340,000 megalitres of *in situ* reserves, and is situated about 130 kilometres north of Mackay. Development of the Condor deposit is being investigated in a detailed study which commenced in 1982 and is still in progress.

The Rundle deposit is situated immediately north-west of Gladstone, so that development could be closely tied to the use of local port facilities, railroads, and skilled manpower. The deposit has *in situ* reserves of about 420,000 megalitres. A slot-cut mine has been established to obtain bulk samples of shale for processing trials in the United States and West Germany.

An oil shale deposit at Julia Creek is geologically distinct from the relatively thick, localised oil shale deposits near the coast. It is also unique in being located far inland—about 200 kilometres east of Mount Isa. The deposit is a shallow outcrop of the enormous Toolebuc oil shale formation which underlies much of the State. In most places, the formation is a thin bed, only 5 to 15 metres thick. The entire Toolebuc formation is thought to contain more than 100m megalitres of recoverable oil.

All commercial development plans of Queensland oil shales presently call for open-cut mining. Material removed from the advancing mine face would be crushed and retorted and the residue used to back-fill the rear face of the mine. In this way, the mine pit would remain roughly the same size as it advances along the oil shale seam.

The scale envisaged for oil shale mines and processing plants rank these among the largest development proposals in Australia. Any one major oil shale development project could provide enough synthetic crude to make Queensland essentially self-sufficient in petroleum products for at least 30 years.

Commercial production of synthetic crude oil could begin as early as 1995, although most analysts currently believe that shale-derived oil could not compete with conventional crude oil until after the year 2000.

OIL SHALE DEPOSITS, QUEENSLAND

Deposit	Estimated <i>in situ</i> reserves	Average oil yield
	megalitres	litres per tonne
Alpha (a)	2,000	400
Condor	1,340,000	64
Duaringa	591,000	80
Julia Creek	238,000	70
Lowmead	117,000	84
Nagoorin	421,000	91
Rundle	421,000	99
Stuart	399,000	94
Yaamba	448,000	95

(a) Alpha is a high-grade oil shale resource, but reserves are relatively small and development would require underground mining.

Solar Energy

All renewable energy resources are ultimately derived from solar energy. Each square metre of land receives, on average, about 5 kilowatt hours of solar energy a day in Queensland. Of course, the amount of sunlight reaching a given area of land surface depends upon its latitude, local climate, and the season. In Rockhampton, where solar radiation levels have been measured over a nine-year period by the Capricornia Institute of Advanced Education, the total solar energy reaching the ground during the day is greatest in November and December, with an average daily value of 6.5 kWh per square metre. The lowest daily solar insolation occurs in June, with an average daily value of 3.75 kWh per square metre.

The most immediate application of solar energy is for domestic hot water heating. A range of solar hot water systems is commercially available, and it is estimated that about 7 per cent of the private homes in Queensland have them installed. In these applications solar energy is used as a partial substitute for electricity or gas.

In the future, there is considerable potential for the generation of electric power from sunlight. Sunlight can be converted directly to electricity by photovoltaic solar cells. New manufacturing methods have allowed the cost of these units to be substantially reduced in recent years, but their present cost is still prohibitive for many applications. Photovoltaic cells generate power only when illuminated by sunlight, so that batteries are generally required to store electrical energy to meet night-time power demands. Inverters and power conditioning units convert the battery voltage to the standard 240 volt alternating current needed to operate household electrical appliances. Power generated by a complete home-size photovoltaic power system is likely to cost five to 10 times as much per kilowatt hour as power generated by central coal-fired generating stations.

Photovoltaic solar power systems are presently utilised for water pumping in isolated areas, communication systems for which alternative power supplies are not available (such as remote microwave relay stations), and ocean buoys. In these applications, connection to the State-wide electric power grid is impossible or prohibitively expensive.

To generate larger amounts of electrical power for remote towns, a more economical approach might be solar ponds. These employ an artificial pond as a solar collector. The Solar Energy Research Centre at the University of Queensland is presently undertaking a study examining the feasibility of using solar ponds to provide electrical power for remote outback communities.

Biomass

Solar energy is utilised by plants, which convert the energy of the sun to chemical energy in the form of cellulose and vegetable oils. Agricultural products and crop waste are a major potential source of energy.

The sugar cane industry in Queensland produces large amounts of bagasse which is a fibrous residue from sugar cane processing. Sugar mills utilise bagasse as a boiler fuel to provide steam for cane processing. Some mills burn the bagasse to generate electricity for the plant, with surplus electricity sold to the local electrical utility. About 0.25 per cent of all electric power distributed through the State-wide grid is surplus power purchased from sugar mills. Despite the local use of bagasse as boiler fuel, there is probably a substantial amount of surplus bagasse which is simply burned as a waste product rather than utilised as an energy resource.

A number of studies have been undertaken on the feasibility of converting by-product molasses or sugar to ethyl alcohol (ethanol) for use as a motor fuel. A report published by the Queensland Energy Advisory Council in July 1982, *Fuel Ethanol from Biomass in Queensland*, concluded that fuel ethanol would not be competitive with conventional sources of motor fuel for the foreseeable future.

Studies undertaken by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) have also demonstrated that vegetable oils can be utilised as a motor fuel in diesel engines, or blended with diesel fuel to extend supplies of petroleum-derived diesel fuel. Vegetable oils can be chemically modified so that their physical properties are very similar to that of diesel fuel derived from petroleum. Oilseed plant varieties which grow in arid conditions or poor soils might provide diesel fuel substitute for farming or mining in remote areas, without conflicting with agricultural land requirements.

Wind Energy

Solar radiation causes temperature differences on the earth's surface leading to the movement of air masses. Wind energy has been used for many years to pump water and generate electrical power for remote farms. There is presently little information available on wind velocity, direction, and availability throughout the State. Recent evidence also indicates that wind measurements taken at ground level can be misleading, and that wind velocities can be much higher at modest elevations.

Further References

Additional information on the topics covered in this chapter may be found in the following publications.

Queensland Office Publications

Agricultural Land Use and Selected Inputs (7411.3) (*annual*)

Value of Agricultural Commodities Produced (7501.3) (*annual*)

Tourist Accommodation (8603.3) (*quarterly*)

Census of Retail Establishments and Selected Service Establishments

Details of Operations by Industry Class (8622.3) (*irregular*)

Industry Details for Statistical Retail Areas (8623.3) (*irregular*)

Hotels and Accommodation Establishments (8624.3) (*irregular*)

Commodity Sales and Service Takings (8625.3) (*irregular*)

Industry and Commodity Details by Size of Establishments (8626.3) (*irregular*)

Central Office Publications

Household Expenditure Survey 1975–76

Bulletin No. 1, Summary of Results (6516.0) (*irregular*)

Bulletin No. 2, Expenditure Patterns for Households of Differing Characteristics and Compositions (6517.0) (*irregular*)

Bulletin No. 3, Expenditure and Income by States and Territories (6518.0) (*irregular*)

Bulletin No. 4, Expenditure and Income by Regions (6519.0) (*irregular*)

Value of Agricultural Commodities Produced (7503.0) (*annual*)

Retail Sales of Goods (8503.0) (*quarterly*)

Census of Retail Establishments and Selected Service Establishments

Details of Operations by Industry Class (8622.0) (*irregular*)

Hotels and Accommodation Establishments (8624.0) (*irregular*)

Commodity Sales and Service Takings (8625.0) (*irregular*)

Industry and Commodity Details by Size of Establishments (8626.0) (*irregular*)

Tourist Accommodation (8635.0) (*quarterly*)

Census of Tourist Accommodation Establishments, Australia and Australian Capital Territory (8637.0) (*irregular*)

Other Publications

Annual reviews of the Queensland Energy Advisory Council

APPENDIX A

Summary of Queensland Statistics Since 1860

SUMMARY OF POPULATION

Year	Population at 31 December (a)			Mean population year ended (a)		Total increase (a)	Natural increase (b)
	Males	Females	Persons	June	December		
1860 ..	16,817	11,239	28,056	n.a.	25,788	4,536	758
1865 ..	53,292	33,629	86,921	n.a.	80,250	13,343	1,799
1870 ..	69,221	46,051	115,272	n.a.	112,217	6,111	3,260
1875 ..	102,161	66,944	169,105	n.a.	161,724	14,762	2,602
1880 ..	124,013	87,027	211,040	n.a.	208,130	5,820	5,179
1885 ..	186,866	129,815	316,681	n.a.	309,134	15,094	5,437
1890 ..	223,252	168,864	392,116	n.a.	386,803	10,627	9,769
1895 ..	248,865	194,199	443,064	n.a.	436,528	13,073	9,722
1900 ..	274,684	219,163	493,847	n.a.	490,081	7,532	9,054
1905 ..	291,807	239,675	531,482	525,373	528,928	6,547	8,123
1910 ..	325,513	273,503	599,016	580,252	591,591	21,171	10,425
1915 ..	366,047	319,020	685,067	688,212	692,699	3,268	12,604
1920 ..	396,555	354,069	750,624	737,464	745,957	14,486	12,309
1925 ..	444,330	400,512	844,842	825,313	836,844	22,758	12,738
1930 ..	481,559	435,177	916,736	903,703	910,319	14,600	11,484
1935 ..	508,348	462,949	971,297	961,200	966,654	11,453	8,837
1940 (e) ..	536,712	494,740	1,031,452	1,021,426	1,026,541	11,357	11,209
1945 (e) ..	556,829	528,035	1,084,864	1,068,630	1,076,610	16,609	17,254
1950 ..	620,329	585,089	1,205,418	1,173,232	1,191,081	35,099	18,629
1951 ..	636,935	601,343	1,238,278	1,207,194	1,223,719	32,860	18,547
1952 ..	652,974	618,282	1,271,256	1,239,868	1,255,896	32,978	19,782
1953 ..	666,348	632,072	1,298,420	1,272,244	1,287,231	27,164	19,776
1954 ..	680,224	645,257	1,325,481	1,300,464	1,313,738	27,061	19,832
1955 ..	696,544	662,314	1,358,858	1,328,064	1,344,445	33,377	21,045
1956 ..	714,288	678,285	1,392,573	1,360,801	1,377,393	33,715	20,223
1957 ..	726,623	693,878	1,420,501	1,394,088	1,408,732	27,928	22,084
1958 ..	740,017	709,320	1,449,337	1,422,349	1,436,156	28,836	22,417
1959 ..	753,906	723,255	1,477,161	1,450,535	1,464,469	27,824	23,250
1960 ..	766,448	735,838	1,502,286	1,478,129	1,491,114	25,125	22,843
1961 ..	784,700	755,500	1,540,300	1,512,400	1,525,000	n.a.	23,881
1962 ..	795,000	767,800	1,562,800	1,539,600	1,551,200	22,600	22,490
1963 ..	810,500	784,900	1,595,400	1,563,300	1,578,300	32,600	22,664
1964 ..	825,800	800,800	1,626,500	1,595,000	1,610,800	31,100	20,461
1965 ..	841,900	817,500	1,659,400	1,626,900	1,644,000	32,900	19,433
1966 ..	855,000	832,100	1,687,100	1,660,100	1,674,200	27,600	18,003
1967 ..	868,500	847,300	1,715,800	1,687,300	1,701,000	28,700	19,956
1968 ..	883,600	864,100	1,747,700	1,715,400	1,730,600	31,900	19,112
1969 ..	898,900	880,800	1,779,700	1,747,400	1,764,200	32,000	20,790
1970 ..	914,600	898,200	1,812,800	1,780,000	1,795,400	33,100	20,475
1971 ..	958,600	948,000	1,906,600	1,863,500	1,883,000	n.a.	23,631
1972 ..	987,200	975,000	1,962,200	1,906,500	1,933,400	55,600	22,653
1973 ..	1,016,400	1,003,000	2,019,400	1,961,200	1,988,900	57,200	21,335
1974 ..	1,044,500	1,029,500	2,074,000	2,017,300	2,044,000	54,600	19,724
1975 ..	1,058,600	1,043,600	2,102,200	2,066,300	2,084,700	28,200	19,982
1976 ..	r 1,053,500	r 1,038,800	r 2,092,400	2,072,000	r 2,091,700	r 41,000	18,004
1977 ..	r 1,071,300	r 1,058,500	r 2,129,800	r 2,110,700	r 2,130,200	r 37,500	18,527
1978 ..	r 1,091,600	r 1,080,500	r 2,172,000	r 2,151,300	r 2,172,300	r 42,200	17,846
1979 ..	r 1,112,800	r 1,102,000	r 2,214,800	r 2,192,800	r 2,215,300	r 42,700	18,807
1980 ..	r 1,138,300	r 1,127,600	r 2,265,900	r 2,239,600	r 2,267,600	r 51,200	18,475
1981 ..	r 1,178,400	r 1,166,800	r 2,345,200	r 2,303,200	r 2,344,600	r 79,300	21,659
1982 ..	1,216,100	1,203,500	2,419,600	2,384,300	2,419,800	74,400	22,391

(a) There is a break in continuity between 1960 and 1961 and between 1970 and 1971. Prior to 1961 full-blood Aborigines were excluded. Estimates from June 1971 are based on the results of the 1976 Census, adjusted for under-enumeration, and take into account natural increase, long-term and permanent overseas migration, and interstate migration involving a change of residence. (b) Excluding

AND VITAL STATISTICS

Births (b)	Birth rate (c)	Marriages (b)	Marriage rate (c)	Deaths (b)	Death rate (c)	Infant deaths (b)		Infant death rate (d)		Year
						Under one year	Under four weeks	Under one year	Under four weeks	
1,236	47.9	278	10.8	478	18.5	141	n.a.	114.1	n.a.	.. 1860
3,532	44.0	1,074	13.4	1,733	21.6	580	n.a.	164.2	n.a.	.. 1865
4,905	43.7	879	7.8	1,645	14.7	526	223	107.2	45.5	.. 1870
6,706	41.5	1,487	9.2	4,104	25.4	1,025	312	152.8	46.5	.. 1875
8,196	39.4	1,547	7.4	3,017	14.5	865	294	105.5	35.9	.. 1880
11,672	37.8	2,842	9.2	6,235	20.2	1,733	512	148.5	43.9	.. 1885
15,407	39.8	3,195	8.3	5,638	14.6	1,548	584	100.5	37.9	.. 1890
14,874	34.1	2,821	6.5	5,152	11.8	1,356	481	91.2	32.3	.. 1895
14,801	30.2	3,371	6.9	5,747	11.7	1,456	512	98.4	34.6	.. 1900
13,626	25.8	3,173	6.0	5,503	10.4	1,029	386	75.5	28.3	.. 1905
16,169	27.3	4,768	8.1	5,744	9.7	1,017	476	62.9	29.4	.. 1910
20,163	29.1	6,135	8.9	7,559	10.9	1,297	606	64.3	30.1	.. 1915
20,256	27.2	6,667	8.9	7,947	10.7	1,281	586	63.2	28.9	.. 1920
20,283	24.2	6,471	7.7	7,545	9.0	917	556	45.2	27.4	.. 1925
18,939	20.8	6,199	6.8	7,455	8.2	757	531	40.0	28.0	.. 1930
17,688	18.3	8,280	8.6	8,851	9.2	659	482	37.3	27.3	.. 1935
20,412	19.9	10,287	10.0	9,203	9.0	721	519	35.3	25.4	(e) 1940
26,713	24.8	9,905	9.2	9,459	8.8	795	641	29.8	24.0	(e) 1945
29,028	24.4	10,304	8.7	10,399	8.7	719	537	24.8	18.5	.. 1950
29,652	24.2	10,814	8.8	11,105	9.1	761	541	25.7	18.2	.. 1951
30,953	24.6	10,056	8.0	11,171	8.9	772	558	24.9	18.0	.. 1952
30,782	23.9	9,859	7.7	11,006	8.6	769	549	25.0	17.8	.. 1953
31,176	23.7	10,027	7.6	11,344	8.6	695	524	22.3	16.8	.. 1954
32,352	24.1	10,098	7.5	11,307	8.4	656	480	20.3	14.8	.. 1955
32,409	23.5	9,934	7.2	12,186	8.8	737	530	22.7	16.4	.. 1956
33,763	24.0	10,271	7.3	11,679	8.3	732	514	21.7	15.2	.. 1957
33,872	23.6	10,255	7.1	11,455	8.0	657	466	19.4	13.8	.. 1958
35,599	24.3	10,581	7.2	12,349	8.4	721	520	20.3	14.6	.. 1959
35,213	23.6	10,227	6.9	12,370	8.3	740	558	21.0	15.8	.. 1960
36,637	24.2	10,392	6.9	12,756	8.4	733	542	20.0	14.8	.. 1961
35,776	23.1	10,665	6.9	13,286	8.6	763	539	21.3	15.1	.. 1962
36,012	22.8	11,443	7.3	13,348	8.5	733	534	20.4	14.8	.. 1963
35,049	21.8	11,766	7.3	14,588	9.1	679	476	19.4	13.6	.. 1964
33,615	20.4	13,007	7.9	14,182	8.6	599	421	17.8	12.5	.. 1965
32,903	19.7	13,339	8.0	14,900	8.9	587	401	17.8	12.2	.. 1966
34,692	20.4	13,634	8.0	14,736	8.7	678	509	19.5	14.7	.. 1967
35,190	20.3	14,860	8.6	16,078	9.3	716	520	20.4	14.8	.. 1968
36,576	20.7	15,669	8.9	15,786	8.9	691	487	18.9	13.3	.. 1969
37,530	20.9	16,082	9.0	17,055	9.5	672	476	17.9	12.7	.. 1970
39,970	21.2	16,538	8.8	16,339	8.7	766	553	19.2	13.8	.. 1971
39,251	20.3	16,066	8.3	16,598	8.6	697	488	17.8	12.4	.. 1972
38,067	19.1	16,490	8.3	16,732	8.4	666	491	17.5	12.9	.. 1973
37,852	18.5	16,086	7.9	18,128	8.9	606	440	16.0	11.6	.. 1974
36,403	17.5	15,230	7.3	16,421	7.9	547	396	15.0	10.9	.. 1975
35,243	16.9	16,703	8.0	17,239	8.2	535	407	15.2	11.5	.. 1976
34,935	16.4	15,737	7.4	16,408	7.7	478	344	13.7	9.8	.. 1977
34,465	15.8	15,431	7.1	16,619	7.6	444	300	12.9	8.7	.. 1978
35,195	15.8	16,082	7.2	16,388	7.4	380	257	10.8	7.3	.. 1979
34,972	15.4	17,157	7.5	16,497	7.3	394	268	11.3	7.7	.. 1980
38,834	16.6	18,305	7.8	17,175	7.3	425	283	10.9	7.3	.. 1981
40,540	16.8	18,928	7.8	18,149	7.5	432	300	10.7	7.4	.. 1982

full-blood Aborigines prior to 1962.

(c) Rate per 1,000 mean population.

(d) Rate per 1,000 live births.

(e) Deaths of defence

personnel were not deducted from natural increase.

SUMMARY OF HEALTH, SOCIAL WELFARE, EDUCATION,

Year	Public hospitals and nursing homes					Psychiatric institution patients		Pensioners at 30 June (c)	
	Number	Staff (a)	Beds	In-patients treated	Expenditure (b)	Admissions	At end of year	Age	Invalid
					\$'000				
1860 ..	6	n.a.	n.a.	421	7	..	..	..	..
1865 ..	7	n.a.	n.a.	1,811	20	68	89	..	..
1870 ..	13	n.a.	366	2,074	34	84	188	..	..
1875 ..	20	n.a.	574	4,080	58	231	356	..	..
1880 ..	29	n.a.	917	4,537	74	254	553	..	..
1885 ..	47	n.a.	1,411	10,417	170	296	786	..	..
1890 ..	54	n.a.	1,709	13,763	204	360	1,099	..	..
1895 ..	59	n.a.	1,918	14,675	191	310	1,393	..	..
1900 ..	71	n.a.	2,182	18,766	239	411	1,728	..	..
1905 ..	75	n.a.	2,392	20,123	227	370	1,942	..	..
1910 ..	81	914	2,572	26,069	307	417	2,267	9,894	492
1915 ..	97	1,359	3,138	37,426	517	484	2,451	12,049	2,954
1920 ..	102	1,758	3,616	48,503	874	571	2,814	13,019	4,960
1925-26 ..	119	2,610	4,755	63,288	1,287	525	3,126	16,250	6,800
1930-31 ..	122	3,173	5,690	72,485	1,438	485	3,185	22,376	9,707
1935-36 ..	119	3,697	6,434	95,571	1,848	602	3,401	25,493	11,377
1940-41 ..	118	4,937	7,607	124,356	2,934	596	3,772	35,168	8,644
1945-46 ..	119	5,844	8,293	147,387	3,982	685	3,876	34,808	9,807
1950-51 ..	131	8,280	9,244	168,412	9,989	930	4,295	48,075	10,740
1951-52 ..	136	8,714	9,581	175,164	13,245	1,005	4,388	50,718	10,571
1952-53 ..	138	9,005	9,852	184,189	15,004	1,142	4,554	54,236	10,691
1953-54 ..	138	9,163	9,971	188,057	15,886	1,141	4,621	58,361	11,022
1954-55 ..	140	9,548	10,657	192,511	17,769	1,141	4,704	62,837	11,638
1955-56 ..	140	9,785	10,705	200,369	19,685	1,238	4,735	66,199	12,165
1956-57 ..	139	10,366	11,481	207,235	22,435	1,391	4,657	69,938	13,113
1957-58 ..	139	10,608	11,293	216,573	23,800	1,421	4,610	72,804	14,230
1958-59 ..	138	10,965	11,756	222,820	26,090	1,526	4,624	75,085	15,397
1959-60 ..	139	11,609	12,422	224,603	27,456	1,453	4,364	82,196	11,605
1960-61 ..	139	12,320	12,376	221,804	29,691	1,357	4,311	89,144	13,084
1961-62 ..	140	12,643	12,458	233,351	31,516	1,616	4,272	93,657	14,650
1962-63 ..	140	13,007	12,545	234,939	32,816	1,750	4,199	96,148	15,876
1963-64 ..	141	13,222	12,668	244,019	35,357	1,754	4,005	98,408	16,893
1964-65 ..	144	13,592	12,949	251,222	37,937	1,785	4,022	100,054	17,402
1965-66 ..	143	13,975	13,273	254,865	40,298	1,586	3,978	101,608	17,818
1966-67 ..	144	14,263	13,420	259,888	43,383	1,680	3,910	103,981	18,408
1967-68 ..	145	14,555	13,628	267,631	46,909	1,541	3,736	108,070	19,621
1968-69 ..	146	15,118	13,481	272,934	50,783	1,924	3,828	110,989	21,370
1969-70 ..	(j) 139	(j) 13,645	(j) 12,331	(j) 273,377	(j) 52,336	(j) 2,646	(j) 3,470	122,547	23,984
1970-71 ..	140	13,849	12,308	277,130	63,851	2,924	3,364	128,817	21,772
1971-72 ..	137	14,196	12,353	287,563	73,667	3,384	3,001	132,000	22,825
1972-73 ..	136	14,927	12,480	300,070	88,148	3,579	2,778	145,036	24,945
1973-74 ..	140	16,055	12,901	303,322	109,033	3,560	3,018	158,628	25,827
1974-75 ..	144	17,241	12,983	314,148	158,020	3,646	3,056	166,454	27,464
1975-76 ..	142	17,809	12,820	323,150	209,646	3,536	2,938	175,603	29,856
1976-77 ..	144	18,541	12,797	328,587	249,427	3,963	2,891	183,992	32,592
1977-78 ..	143	19,447	13,050	332,405	229,433	7,985	3,261	193,268	32,453
1978-79 ..	142	20,575	13,307	349,109	257,481	7,954	2,992	198,017	34,706
1979-80 ..	155	21,082	13,634	366,531	285,849	5,191	2,664	202,487	36,818
1980-81 ..	155	21,606	14,242	385,975	358,701	5,394	2,433	207,089	35,555
1981-82 ..	158	23,743	14,613	406,218	451,746	5,735	2,323	210,317	33,492
1982-83 ..	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	213,844	32,390

(a) To 1959-60, average number employed during year; 1960-61 to 1968-69, number at end of year; from 1969-70, full-time equivalent at end of year. (b) Excluding loan expenditure. Including out-patient expenditure. (c) Since 1939-40, invalid pensioners have been transferred to the age pension on reaching the qualifying age. (d) Net enrolment during the year until 1938 (1938-39); thereafter number on roll at end of school year until 1950, at August from 1951, and at July from 1980. Excluding pre-schools; including business colleges until 1931-32.

(e) Enrolments for year ended middle of financial year shown. (f) From 1915 to 1923, at 30 June following the year shown. (g) From 1924-25 to 1947-48 at the middle of the financial year shown. (h) Divorces, nullities of marriage, and judicial

AND LAW, ORDER, AND PUBLIC SAFETY STATISTICS

Schools	Pupils at schools (d)	University students (e)	Police force at end of year (f)	Prisoners in gaol at end of year (g)		Higher court criminal convictions	Divorces (h)	Liquor licences in force at end of year (i)	Year
				Males	Females				
41	1,890	..	n.a.	28	6	30	n.a.	107	.. 1860
101	9,091	..	392	190	20	99	n.a.	365	.. 1865
173	16,425	..	n.a.	206	17	89	n.a.	618	.. 1870
283	34,591	..	660	267	29	176	n.a.	940	.. 1875
415	44,104	..	626	301	48	171	2	1,682	.. 1880
551	59,301	..	873	467	52	266	2	1,269	.. 1885
737	76,135	..	897	580	55	275	10	1,379	.. 1890
923	87,123	..	907	538	49	245	4	1,282	.. 1895
1,084	109,963	..	885	511	52	278	13	1,470	.. 1900
1,215	110,886	..	912	495	40	258	6	1,561	.. 1905
1,348	112,863	..	1,050	494	33	376	21	1,682	.. 1910
1,565	129,296	265	1,293	416	34	351	27	1,828	.. 1915
1,771	150,780	291	1,215	329	16	203	60	1,682	.. 1920
1,888	167,247	457	1,258	335	9	234	125	1,614	.. 1925-26
1,897	175,344	778	1,329	349	10	198	122	1,598	.. 1930-31
1,925	174,319	1,090	1,365	328	6	222	152	1,661	.. 1935-36
1,914	163,396	1,902	1,543	283	4	145	255	1,625	.. 1940-41
1,746	164,365	2,224	1,776	507	17	229	1,162	1,623	.. 1945-46
1,810	198,755	4,245	2,251	468	11	346	708	1,686	.. 1950-51
1,820	205,448	4,014	2,483	480	17	336	711	1,698	.. 1951-52
1,846	223,851	3,850	2,473	559	11	419	730	1,714	.. 1952-53
1,835	227,575	3,735	2,427	620	17	502	714	1,719	.. 1953-54
1,840	239,009	4,112	2,378	597	11	382	803	1,743	.. 1954-55
1,845	249,335	4,527	2,447	628	19	431	708	1,789	.. 1955-56
1,847	261,275	5,329	2,514	691	22	584	689	1,794	.. 1956-57
1,856	277,139	5,615	2,640	816	27	883	767	1,793	.. 1957-58
1,853	288,826	6,718	2,702	906	19	915	745	1,797	.. 1958-59
1,845	300,397	7,444	2,665	907	24	1,020	705	1,786	.. 1959-60
1,827	308,998	8,700	2,690	921	29	1,279	781	1,789	.. 1960-61
1,801	316,800	9,525	2,764	873	17	1,175	928	1,787	.. 1961-62
1,783	325,869	10,507	2,812	916	30	1,187	919	1,802	.. 1962-63
1,776	332,818	11,466	2,832	826	18	1,134	986	1,798	.. 1963-64
1,729	340,583	12,424	2,822	987	37	1,201	1,059	1,793	.. 1964-65
1,686	347,380	13,581	2,986	1,035	24	1,330	1,039	1,798	.. 1965-66
1,667	357,576	14,821	3,067	1,088	18	1,279	1,083	1,808	.. 1966-67
1,649	368,385	15,253	3,094	1,010	24	1,160	1,140	1,806	.. 1967-68
1,606	375,741	15,317	3,190	1,095	39	1,610	1,243	1,822	.. 1968-69
1,590	383,234	15,773	3,231	1,185	22	1,402	1,511	1,882	.. 1969-70
1,578	387,745	17,584	3,204	1,218	18	1,727	1,411	1,969	.. 1970-71
1,573	392,883	18,949	3,359	1,410	29	1,758	1,737	2,026	.. 1971-72
1,568	399,569	18,591	3,524	1,547	27	1,812	1,700	2,085	.. 1972-73
1,567	407,582	18,815	3,776	1,376	25	1,610	1,844	2,155	.. 1973-74
1,562	414,179	20,701	3,954	1,462	21	1,803	2,689	2,214	.. 1974-75
1,540	422,522	20,047	4,040	1,536	30	1,966	9,619	2,250	.. 1975-76
1,540	429,694	20,904	4,236	1,498	23	1,008	7,302	2,289	.. 1976-77
1,554	437,941	21,513	4,235	1,597	37	891	6,110	2,346	.. 1977-78
1,584	444,045	21,958	4,135	1,697	43	946	5,817	2,446	.. 1978-79
1,597	450,575	21,721	4,390	1,686	53	1,143	6,231	2,518	.. 1979-80
1,617	460,927	22,249	4,557	1,733	49	1,243	6,121	2,605	.. 1980-81
1,626	472,840	22,392	4,547	1,661	45	1,263	6,266	2,719	.. 1981-82
1,636	481,568	22,528	4,871	1,728	45	n.y.a.	n.y.a.	2,830	.. 1982-83

separations. Divorces are taken as decrees nisi until 1933-34, and from 1934-35 as decrees made absolute during the year. From 1941, figures are for the calendar year ended six months after the year shown.

(i) The licences exclude bottlers' licences and include licensed victuallers throughout; wine-sellers from 1900; spirit merchants and registered clubs from 1913; sporting clubs and packets from 1934-35; ex-servicemen's clubs from 1955-56; restaurants from 1961-62; bistros, cabarets, function rooms, and theatres from 1970-71; caterer's licences from 1976-77; airport licences from 1977-78; and cultural centres from 1982-83.

(j) New series.

SUMMARY OF TRANSPORT AND

Year	Shipping entered all ports from other states and countries (a)	Railways					
		Lines open	Passenger journeys (b)	Goods and livestock carried (c)	Earnings	Working expenses	Capital account (d)
	'000 tons	kilometres	'000	'000 tonnes	\$'000	\$'000	\$'000
1860	46	..	..	..	..	..	..
1865	173	34	17	3	11	7	536
1870	133	333	36	25	143	137	4,385
1875	395	428	138	52	322	184	5,859
1880	634	1,025	194	140	615	332	9,991
1885	496	2,306	1,369	552	1,467	888	18,532
1890-91 ..	469	3,549	2,731	905	1,817	1,291	30,203
1895-96 ..	470	3,862	2,274	1,167	2,171	1,289	33,519
1900-01 ..	835	4,508	4,761	1,739	2,634	2,116	39,479
1905-06 ..	1,068	5,049	4,569	1,951	3,092	1,727	43,482
1910-11 ..	1,842	6,225	8,299	3,348	5,461	3,126	51,798
1915-16 ..	1,660	7,994	13,939	4,076	7,491	5,490	73,677
1920-21 ..	1,772	9,257	14,908	3,930	10,559	10,097	87,114
1925-26 ..	2,737	10,042	28,384	5,188	14,874	12,920	108,224
1930-31 ..	3,186	10,507	22,009	3,920	12,954	10,160	125,872
1935-36 ..	4,089	10,569	25,244	4,739	13,395	10,434	76,106
1940-41 ..	2,435	10,569	26,194	5,690	16,830	13,427	80,806
1945-46 ..	1,837	10,569	38,200	5,850	23,833	20,888	83,092
1950-51 ..	3,201	10,557	34,118	7,297	39,544	38,878	98,520
1951-52 ..	2,919	10,557	35,003	6,933	46,715	49,319	106,612
1952-53 ..	3,521	10,557	35,819	7,556	51,970	55,993	116,970
1953-54 ..	3,783	10,557	35,879	8,292	60,446	58,242	134,199
1954-55 ..	4,005	10,546	35,919	8,628	63,250	61,892	142,032
1955-56 ..	4,128	10,390	35,647	8,311	62,626	67,747	148,690
1956-57 ..	4,151	10,390	34,270	8,589	73,356	75,579	161,453
1957-58 ..	4,475	10,390	33,665	7,891	69,273	73,789	173,666
1958-59 ..	4,928	10,342	33,457	8,507	72,338	75,007	181,733
1959-60 ..	5,284	10,311	32,346	8,246	71,341	76,706	191,416
1960-61 ..	5,802	10,177	28,876	8,109	73,059	77,154	197,755
1961-62 ..	5,834	9,780	26,701	8,284	72,318	76,297	205,745
1962-63 ..	6,541	9,780	26,082	8,876	75,244	75,592	212,809
1963-64 ..	7,166	9,582	25,903	9,953	84,260	78,468	223,252
1964-65 ..	7,632	9,310	25,215	10,192	81,321	80,758	233,911
1965-66 ..	8,513	9,310	25,979	10,211	84,178	84,370	246,699
1966-67 ..	9,023	9,222	26,371	10,348	87,864	84,561	258,543
1967-68 ..	9,769	9,374	26,591	11,312	94,019	87,717	268,095
1968-69 ..	11,594	9,373	28,165	13,184	102,451	91,720	278,494
1969-70 ..	13,126	9,357	28,515	14,671	108,831	96,831	288,271
1970-71 ..	14,791	9,329	29,536	15,665	110,165	105,494	301,957
1971-72 ..	16,072	9,560	31,946	19,267	124,782	120,110	316,529
1972-73 ..	18,782	9,560	32,145	24,666	137,745	133,841	331,671
1973-74 ..	19,413	9,560	33,723	25,401	149,844	162,525	349,538
1974-75 ..	21,706	9,780	36,632	30,208	183,687	228,490	368,097
1975-76 ..	20,316	9,844	34,278	33,118	230,492	266,351	380,393
1976-77 ..	22,117	9,796	31,054	34,237	262,561	299,868	403,961
1977-78 ..	21,965	9,787	29,231	34,155	273,551	337,762	r 428,732
1978-79 ..	n.a.	9,789	27,275	36,542	310,418	365,070	r 465,184
1979-80 ..	n.a.	9,904	29,482	38,440	352,700	422,503	488,435
1980-81 ..	n.a.	9,932	31,873	41,504	416,796	486,126	516,052
1981-82 ..	n.a.	9,969	34,237	43,659	520,265	588,051	r 558,449
1982-83 ..	n.a.	9,979	34,749	43,706	549,859	664,548	592,348

(a) Since 1883, vessels calling at more than one port in Queensland have been counted once only. From 1890 until 1910 the figures are for years ended December; other figures are for the years shown. (b) Until 1922-23, journeys made by season ticket holders were not included.

(c) Until 1895-96, carriage of livestock was not included. From 1930-31 to 1953-54, includes some duplication due to transfers between the uniform gauge and 1.067 mm systems. (d) From 1 July 1931, the capital account was reduced by \$56,000,000 under *The Railway Capital Indebtedness Reduction Act of 1931*.

(e) From 1966-67, figures are for the Brisbane Statistical Division. (f) Figures up to 1930-31 are for the calendar year ended six months earlier than the year shown. (g) Revenue credited to Queensland up to

COMMUNICATION STATISTICS

Metropolitan (e) transport (passengers)				Constructed roads at end of year	Motor vehicles		Postal and telecommunications revenue (g)	Broadcast listeners' licences (h)	Year
Rail	Trams (f)	Municipal buses	Private buses		On register at end of year	Revenue collected			
'000	'000	'000	'000	kilometres	'000	\$'000	\$'000	No.	
..	..	..	n.a.	n.a.	..	..	10	..	1860
..	..	..	n.a.	n.a.	..	..	57	..	1865
..	..	..	n.a.	n.a.	..	..	65	..	1870
..	..	..	n.a.	n.a.	..	..	124	..	1875
n.a.	..	..	n.a.	n.a.	..	..	162	..	1880
n.a.	n.a.	..	n.a.	n.a.	..	..	358	..	1885
n.a.	3,399	..	n.a.	n.a.	..	..	(i) 445	..	1890-91
n.a.	n.a.	..	n.a.	n.a.	..	..	(i) 463	..	1895-96
n.a.	13,362	..	n.a.	n.a.	..	..	(i) 630	..	1900-01
n.a.	20,050	..	n.a.	n.a.	n.a.	n.a.	720	..	1905-06
n.a.	32,419	..	n.a.	n.a.	n.a.	n.a.	1,143	..	1910-11
n.a.	49,695	..	n.a.	n.a.	n.a.	n.a.	1,437	..	1915-16
n.a.	69,237	..	n.a.	n.a.	n.a.	n.a.	2,460	..	1920-21
22,170	82,515	..	n.a.	n.a.	53.3	408	3,147	8,129	1925-26
17,118	73,617	..	n.a.	(i) 48,041	90.8	1,034	3,851	24,062	1930-31
20,229	82,583	..	n.a.	(i) 53,549	107.6	1,430	4,402	83,025	1935-36
21,055	97,982	1,651	n.a.	n.a.	128.4	2,065	5,395	168,216	1940-41
28,799	147,007	5,464	n.a.	n.a.	143.3	1,935	9,188	186,396	1945-46
27,601	108,359	23,765	n.a.	82,233	240.8	5,200	12,326	270,587	1950-51
28,640	108,213	28,142	n.a.	84,742	255.0	6,826	16,234	279,852	1951-52
29,244	107,891	31,944	n.a.	85,522	266.2	8,846	17,356	282,338	1952-53
29,475	104,789	33,442	n.a.	86,336	284.2	9,607	18,464	287,683	1953-54
29,712	101,849	34,825	n.a.	88,812	307.7	10,232	20,256	293,542	1954-55
29,748	95,843	35,428	n.a.	91,556	326.3	10,675	21,682	301,371	1955-56
28,783	89,346	35,849	n.a.	94,546	344.4	11,432	24,646	312,527	1956-57
28,524	85,808	37,768	n.a.	98,870	363.9	11,923	26,668	320,626	1957-58
28,398	81,825	37,751	n.a.	104,657	381.9	13,172	27,804	337,760	1958-59
27,548	80,670	37,512	11,633	108,335	404.0	14,447	31,764	344,198	1959-60
24,582	73,659	33,200	12,661	114,946	418.6	15,385	35,194	341,101	1960-61
22,890	72,664	33,431	13,228	116,084	431.7	17,110	35,698	328,525	1961-62
22,414	67,133	34,444	12,921	(j) 115,334	459.0	18,797	38,298	334,566	1962-63
22,512	63,382	36,193	13,435	118,763	497.4	21,879	41,498	342,321	1963-64
22,254	63,029	37,327	14,721	123,417	536.1	24,889	47,399	343,401	1964-65
23,227	56,011	33,864	13,579	125,870	563.4	25,326	50,769	340,687	1965-66
23,703	48,525	29,225	17,210	(j) 125,315	588.5	30,519	54,762	340,477	1966-67
24,065	46,290	29,973	17,306	(j) 124,883	620.9	35,228	62,308	371,637	1967-68
25,771	(k) 25,039	42,307	17,024	126,713	649.9	37,650	74,678	382,869	1968-69
26,317	..	71,297	17,558	127,232	686.1	40,166	81,638	384,951	1969-70
27,621	..	65,220	16,853	128,759	726.5	41,892	94,353	394,669	1970-71
30,184	..	58,724	16,736	129,171	r 774.0	44,278	110,428	405,181	1971-72
30,500	..	58,656	19,155	130,500	827.0	48,579	127,475	416,572	1972-73
32,003	..	55,915	15,419	131,412	889.7	53,622	150,157	(i) 429,002	1973-74
34,821	..	49,078	14,832	132,364	918.0	55,157	183,071	..	1974-75
32,448	..	48,052	12,512	132,897	1,012.2	76,071	267,391	..	1975-76
29,296	..	47,830	13,597	134,175	1,067.2	83,871	310,596	..	1976-77
27,526	..	48,708	13,226	(m) 133,295	1,129.6	88,177	326,611	..	1977-78
25,850	..	47,978	12,335	134,586	r 1,183.4	106,603	365,461	..	1978-79
28,006	..	46,446	12,019	137,785	1,256.9	108,434	421,599	..	1979-80
30,330	..	41,341	n.a.	138,405	1,355.6	117,608	490,050	..	1980-81
32,592	..	42,525	n.a.	141,211	1,439.5	173,728	575,006	..	1981-82
33,135	..	44,556	n.a.	n.y.a.	1,496.1	199,821	691,847	..	1982-83

1941-42; thereafter actual collections are shown. Radio revenue excluded from 1 July 1949. From July 1975 the figures are the combined revenue of Australia Post and Telecom. (h) Excluding licences for receivers in excess of one, issued from July 1942 to January 1952.

(i) Calendar year ended six months earlier than the year shown. (j) Decrease due to re-survey. (k) Ceased operations April 1969. (l) Abolished September 1974. (m) Figures from 1978 were obtained from the Grants Commission, prior figures were from Local Authorities.

SUMMARY OF LAND AND

Year	Land		Livestock at end of year (a)				
	Alienated	Leased	Meat cattle (b)	Milk cattle (b)	All cattle	Sheep	Pigs
	'000 hectares	'000 hectares	'000	'000	'000	'000	'000
1860 ..	44	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	433	3,449	7
1865 ..	216	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	848	6,595	15
1870 ..	378	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	1,077	8,164	31
1875 ..	706	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	1,813	7,228	46
1880 ..	1,845	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	3,163	6,936	66
1885 ..	4,492	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	4,163	8,994	56
1890 ..	4,985	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	5,558	18,007	97
1895 ..	5,751	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	6,822	19,857	101
1900 ..	6,439	113,811	<i>n.a.</i>	<i>n.a.</i>	4,078	10,339	122
1905 ..	7,147	97,187	<i>n.a.</i>	<i>n.a.</i>	2,964	12,535	164
1910 ..	9,483	119,328	<i>n.a.</i>	<i>n.a.</i>	5,132	20,332	152
1915 ..	11,017	134,690	4,278	503	4,781	15,950	118
1920 ..	10,393	131,869	5,782	673	6,455	17,405	104
1925 ..	9,940	123,159	5,670	767	6,437	20,663	200
1930 ..	10,357	127,634	4,423	1,041	5,464	22,542	218
1935 ..	11,328	134,740	4,655	1,378	6,033	18,060	305
1940 ..	11,264	138,772	4,764	1,447	6,210	23,936	436
1945 ..	11,251	143,724	5,100	1,443	6,542	18,944	415
1950 ..	11,232	145,453	5,373	1,361	6,734	17,478	375
1951 ..	11,230	145,543	5,211	1,223	6,434	16,164	317
1952 ..	11,230	146,178	5,450	1,302	6,751	17,030	336
1953 ..	11,230	146,549	5,766	1,320	7,086	18,194	384
1954 ..	11,230	146,582	5,919	1,319	7,238	20,222	407
1955 ..	11,232	147,481	6,001	1,329	7,330	22,116	373
1956 ..	11,232	147,178	6,138	1,324	7,462	23,190	395
1957 ..	11,231	147,334	5,963	1,224	7,187	22,274	423
1958 ..	11,237	147,848	5,687	1,197	6,884	22,148	400
1959 ..	11,260	147,410	5,829	1,183	7,012	23,332	429
1960 ..	11,319	149,091	5,847	1,157	7,004	22,135	448
1961 ..	11,378	149,174	5,942	1,156	7,098	22,125	433
1962 ..	11,485	148,621	6,090	1,143	7,234	22,811	402
1963 ..	11,752	148,250	6,282	1,120	7,402	24,337	388
1964 ..	12,215	149,455	6,334	1,058	7,393	24,016	406
1965 ..	12,787	148,850	5,930	958	6,888	18,384	417
1966 ..	13,911	147,887	6,020	899	6,919	19,305	468
1967 ..	15,245	146,276	6,526	835	7,361	19,948	520
1968 ..	18,783	143,979	6,910	758	7,668	20,324	535
1969 ..	21,424	141,459	6,808	707	7,515	16,446	480
1970 ..	23,290	139,848	7,278	667	7,944	14,774	491
1971 ..	24,292	138,787	8,375	646	9,021	14,604	535
1972 ..	25,305	137,658	9,191	604	9,795	13,346	542
1973 ..	27,958	134,357	9,767	529	10,297	13,119	441
1974 ..	29,039	133,696	10,364	515	10,879	13,908	400
1975 ..	29,840	132,486	10,844	503	11,347	13,599	409
1976 ..	30,941	129,804	11,036	470	11,506	13,304	441
1977 ..	31,508	129,019	11,059	432	11,490	13,438	463
1978 ..	32,002	129,487	10,462	398	10,859	13,592	487
1979 ..	32,476	128,465	9,957	375	10,332	12,163	510
1980 ..	33,353	127,476	9,561	364	9,925	10,620	502
1981 ..	33,923	125,462	9,416	366	9,782	12,344	513
1982 ..	<i>n.y.a.</i>	<i>n.y.a.</i>	8,981	369	9,349	12,225	551

(a) From 1942, figures are at 31 March of the following year.

(b) Figures from 1946 include stock kept for meat production by dairy farmers as meat cattle.

(c) Horses not on rural holdings and all mules and donkeys are excluded after 1941.

(d) From 1924 to 1935 and from 1941, figures are for the financial year ended 30 June following the year shown. In earlier years the figures differ somewhat from those published by the Australian Statistician, who made certain adjustments to the State records. Prior to 1907, exports are taken for production.

LIVESTOCK STATISTICS

Horses (c)	Wool production (d) (greasy equivalent)		Butter production (e)		Cheese production (e)		Year
	Quantity	Value	Quantity	Value	Quantity	Value	
'000	'000 kg	\$'000	tonnes	\$'000	tonnes	\$'000	
24	2,271	888	n.a.	n.a.	n.a.	n.a.	.. 1860
51	5,557	1,771	n.a.	n.a.	n.a.	n.a.	.. 1865
83	17,510	2,052	n.a.	n.a.	n.a.	n.a.	.. 1870
121	14,591	2,732	n.a.	n.a.	n.a.	n.a.	.. 1875
179	15,984	2,775	n.a.	n.a.	n.a.	n.a.	.. 1880
260	24,203	3,559	n.a.	n.a.	n.a.	n.a.	.. 1885
366	30,549	5,049	907	n.a.	77	n.a.	.. 1890
469	49,572	5,974	1,688	n.a.	835	n.a.	.. 1895
457	29,342	4,394	3,937	n.a.	900	n.a.	.. 1900
431	31,828	5,300	9,217	n.a.	1,216	n.a.	.. 1905
594	63,163	11,816	14,178	2,668	1,881	186	.. 1910
687	59,322	12,534	11,547	3,488	1,988	338	.. 1915
742	52,077	14,352	18,484	8,400	5,221	1,066	.. 1920
638	66,672	21,986	28,576	9,844	5,707	1,180	.. 1925
482	82,581	14,080	43,418	11,958	6,191	770	.. 1930
442	64,770	16,576	52,581	12,005	4,150	540	.. 1935
443	97,388	23,546	54,404	15,296	5,322	798	.. 1940
367	78,584	21,728	46,524	18,678	12,218	2,805	.. 1945
307	70,156	177,636	48,680	31,379	8,818	3,104	.. 1950
289	62,944	94,380	28,665	24,307	4,775	2,143	.. 1951
282	74,003	119,806	50,218	47,467	9,590	4,778	.. 1952
273	79,113	122,250	42,831	41,127	6,854	3,430	.. 1953
267	80,081	104,218	46,965	44,185	8,048	3,697	.. 1954
261	88,003	106,268	49,320	43,214	7,701	3,727	.. 1955
255	103,267	155,044	42,087	36,419	7,252	3,348	.. 1956
243	92,703	107,672	33,118	30,129	5,258	2,488	.. 1957
239	99,404	90,150	41,997	35,563	8,352	4,075	.. 1958
234	107,137	109,146	39,875	38,247	8,628	5,004	.. 1959
224	106,862	101,718	31,778	30,880	7,338	3,865	.. 1960
217	104,477	101,274	36,383	32,588	9,118	4,483	.. 1961
212	105,976	115,462	37,195	32,791	10,365	5,090	.. 1962
207	115,841	141,458	36,071	33,965	9,644	5,340	.. 1963
201	114,045	117,218	33,486	32,255	8,662	5,153	.. 1964
190	87,440	90,961	31,837	29,208	8,061	4,667	.. 1965
182	92,380	93,190	33,736	30,278	10,465	5,860	.. 1966
181	102,885	94,874	28,824	25,385	10,061	5,669	.. 1967
176	112,040	108,060	19,542	17,211	8,104	4,370	.. 1968
173	89,064	69,783	22,784	19,524	9,295	5,006	.. 1969
165	76,554	44,916	18,773	17,658	7,684	4,600	.. 1970
n.a.	83,160	61,732	18,193	18,442	8,251	5,586	.. 1971
n.a.	70,195	123,512	15,857	14,470	8,753	6,157	.. 1972
n.a.	63,833	107,417	11,699	10,343	9,225	6,866	.. 1973
n.a.	66,262	81,301	10,360	9,621	10,066	8,788	.. 1974
142	66,316	90,597	10,965	10,241	12,809	10,888	.. 1975
152	64,395	109,749	7,573	8,111	11,461	10,315	.. 1976
162	59,272	106,889	4,837	5,828	10,106	9,889	.. 1977
171	63,831	127,428	5,644	7,140	12,562	12,951	.. 1978
176	59,001	138,554	3,520	4,647	11,328	16,471	.. 1979
178	46,480	116,970	2,796	4,370	10,766	15,492	.. 1980
164	r 60,674	r 150,829	r 3,209	r 6,043	13,623	r 22,641	.. 1981
165	54,090	136,753	3,881	7,913	12,599	21,935	.. 1982

converting scoured to greasy by multiplying by 2, except in 1860 and 1865, when greasy and scoured were not separated in Customs returns.
(e) From 1924, figures are for the year ended 30 June following the year shown. Values include subsidy or bounty payable from 1942-43 to 1974-75.

SUMMARY OF AGRICULTURAL

Season	Sugar				Maize (b)		Wheat	
	Area cut for crushing	Cane produced	Sugar mills (a)	Raw sugar made	Area harvested	Grain produced	Area harvested	Grain produced
	hectares	'000 tonnes	No.	'000 tonnes	hectares	'000 tonnes	hectares	'000 tonnes
1860-61 ..	..	..	..	..	618	n.a.	79	n.a.
1865-66 ..	n.a.	n.a.	n.a.	n.a.	2,527	n.a.	837	n.a.
1870-71 ..	885	n.a.	39	3	6,491	n.a.	1,170	1
1875-76 ..	3,103	n.a.	66	6	15,666	n.a.	1,642	3
1880-81 ..	5,507	n.a.	83	16	17,850	36	4,429	6
1885-86 ..	15,603	n.a.	166	57	29,033	40	2,134	1
1890-91 ..	16,272	n.a.	110	70	40,226	60	4,166	6
1895-96 ..	22,570	n.a.	(a) 64	87	40,663	61	5,241	3
1900-01 ..	29,401	862	58	94	51,789	62	32,093	32
1905-06 ..	38,887	1,439	51	155	46,021	55	48,302	31
1910-11 ..	38,300	1,870	51	214	73,192	113	43,187	28
1915-16 ..	38,226	1,172	45	142	59,276	51	37,920	11
1920-21 ..	36,075	1,360	34	170	46,865	51	71,759	101
1925-26 ..	76,759	3,727	37	494	62,424	86	67,177	54
1930-31 ..	89,858	3,586	35	525	69,677	116	110,202	139
1935-36 ..	92,477	4,288	33	620	63,685	89	96,975	73
1940-41 ..	106,553	5,264	33	771	83,086	113	130,342	155
1945-46 ..	92,971	4,625	32	655	55,217	73	158,840	223
1950-51 ..	106,702	6,799	32	894	45,514	77	226,130	239
1951-52 ..	110,629	5,085	31	715	44,993	62	183,947	180
1952-53 ..	111,190	6,952	31	950	43,799	67	293,193	508
1953-54 ..	134,640	8,891	31	1,240	46,432	77	234,705	277
1954-55 ..	148,779	10,022	31	1,322	46,407	78	278,182	448
1955-56 ..	147,812	8,754	31	1,154	43,765	69	235,419	406
1956-57 ..	146,064	9,122	31	1,191	50,831	88	145,668	192
1957-58 ..	147,704	9,090	31	1,276	49,471	80	186,414	181
1958-59 ..	144,153	9,897	31	1,376	45,892	93	284,901	438
1959-60 ..	121,297	8,563	31	1,237	52,529	103	276,455	368
1960-61 ..	132,432	8,824	31	1,341	53,573	98	280,284	299
1961-62 ..	150,633	9,166	31	1,336	63,042	121	303,386	327
1962-63 ..	156,807	12,293	31	1,798	64,460	129	371,872	508
1963-64 ..	162,708	11,686	31	1,674	67,420	112	379,436	606
1964-65 ..	182,496	14,515	31	1,885	68,109	124	415,014	621
1965-66 ..	197,234	13,763	31	1,913	61,950	82	385,972	474
1966-67 ..	216,506	15,762	31	2,238	61,112	126	496,702	972
1967-68 ..	214,819	15,970	31	2,250	59,785	121	597,555	746
1968-69 ..	221,082	17,694	31	2,646	43,981	69	723,814	1,143
1969-70 ..	204,762	14,936	31	2,114	46,186	88	608,668	405
1970-71 ..	211,511	16,466	31	2,376	51,725	104	333,897	120
1971-72 ..	224,407	18,410	31	2,670	44,546	97	555,990	722
1972-73 ..	232,338	18,087	31	2,714	34,913	70	470,622	405
1973-74 ..	215,937	18,279	31	2,406	27,002	56	394,702	526
1974-75 ..	243,231	19,421	31	2,728	28,675	72	488,500	692
1975-76 ..	245,795	21,069	30	2,751	28,720	78	576,152	830
1976-77 ..	276,554	22,269	30	3,163	32,898	77	582,005	794
1977-78 ..	280,449	22,331	30	3,209	28,733	80	606,791	569
1978-79 ..	237,680	20,135	30	2,749	34,122	111	746,956	1,962
1979-80 ..	255,358	19,860	30	2,807	41,205	98	733,287	846
1980-81 ..	274,259	22,540	30	3,149	42,566	123	726,964	485
1981-82 ..	301,658	23,588	30	3,250	47,548	150	941,113	1,482
1982-83 ..	302,503	23,115	30	3,325	50,923	87	767,043	754

(a) Number of mills which actually operated during each season. Prior to 1895-96 the figures include a number of juice mills. (b) Figures up to 1967-68 are for the calendar year ended six months earlier than the year shown, and from 1968-69 for the calendar year ended six months later than the year shown. Details of the 1968 season not appearing in the table are: maize, 48,643 hectares, 93(000) tonnes; and

PRODUCTION STATISTICS

Hay and green forage (c)	Cotton (b)		Bananas		Pineapples		Total area under crop (e)	Season
	Area harvested	Raw cotton produced (d)	Total area	Production	Total area	Production		
hectares	hectares	'000 kg	hectares	tonnes	hectares	tonnes	'000 hectares	
n.a.	6	n.a.	..	..	..	..	1	.. 1860-61
n.a.	193	66	..	..	..	..	6	.. 1865-66
n.a.	5,938	740	137	n.a.	73	n.a.	21	.. 1870-71
n.a.	677	142	98	n.a.	35	n.a.	31	.. 1875-76
n.a.	251	57	166	914	66	881	46	.. 1880-81
16,897	20	7	418	2,108	148	2,066	80	.. 1885-86
16,451	6	2	1,579	27,941	292	4,454	91	.. 1890-91
19,490	200	39	1,585	18,873	343	6,384	115	.. 1895-96
33,970	..	..	2,515	29,491	380	7,197	185	.. 1900-01
41,929	69	16	2,508	31,878	747	8,586	212	.. 1905-06
76,172	186	22	2,104	14,250	878	13,937	270	.. 1910-11
117,953	29	2	3,305	15,393	1,501	15,613	295	.. 1915-16
95,816	67	7	3,634	15,215	1,582	14,004	315	.. 1920-21
127,197	16,213	2,598	5,976	32,818	1,617	15,291	418	.. 1925-26
109,067	9,167	2,540	7,296	38,965	2,243	16,951	463	.. 1930-31
182,497	22,236	3,203	3,440	22,023	2,339	22,573	540	.. 1935-36
265,920	16,698	1,872	3,332	19,787	2,902	36,290	702	.. 1940-41
263,446	3,115	295	3,817	16,409	3,117	27,823	737	.. 1945-46
254,239	1,195	182	2,780	15,139	3,707	42,454	841	.. 1950-51
262,033	1,813	249	2,588	11,354	3,729	30,244	818	.. 1951-52
258,036	2,374	342	2,938	9,779	4,073	37,407	979	.. 1952-53
296,252	3,628	938	3,047	13,539	4,725	50,599	954	.. 1953-54
293,145	3,390	619	3,378	13,691	5,096	60,641	1,049	.. 1954-55
304,292	5,378	931	2,879	15,901	4,984	68,396	1,052	.. 1955-56
277,317	4,588	640	2,353	13,336	4,813	56,509	998	.. 1956-57
316,566	4,194	603	2,284	11,253	5,268	62,520	1,050	.. 1957-58
289,343	4,246	675	2,497	13,082	5,772	80,945	1,151	.. 1958-59
325,390	8,147	1,608	2,574	16,155	4,920	73,951	1,182	.. 1959-60
387,240	14,911	2,473	2,414	16,079	4,360	60,945	1,234	.. 1960-61
386,962	10,881	1,691	2,395	16,790	4,168	61,470	1,296	.. 1961-62
402,698	14,298	2,018	2,372	18,543	4,177	65,111	1,406	.. 1962-63
439,960	11,519	1,278	2,380	17,374	4,412	70,158	1,473	.. 1963-64
481,691	5,483	1,015	2,166	19,483	4,615	68,684	1,599	.. 1964-65
522,582	5,445	1,642	2,188	19,076	5,161	77,693	1,651	.. 1965-66
526,426	4,519	1,911	2,235	20,549	5,985	95,559	1,849	.. 1966-67
586,019	4,706	3,032	2,382	22,429	6,214	107,429	1,973	.. 1967-68
611,559	5,394	4,553	2,340	25,223	6,286	100,385	2,164	.. 1968-69
726,945	5,406	4,351	2,284	27,535	6,355	100,097	2,296	.. 1969-70
575,899	5,213	3,109	2,462	32,564	6,352	116,895	1,901	.. 1970-71
451,603	6,896	6,637	2,603	29,922	6,292	127,479	2,137	.. 1971-72
541,582	8,008	4,809	2,601	34,542	6,218	125,838	2,090	.. 1972-73
459,553	7,105	6,588	2,279	35,888	6,177	114,417	1,905	.. 1973-74
389,648	7,386	6,396	2,118	31,621	5,823	110,118	2,001	.. 1974-75
342,004	5,966	4,985	2,128	36,398	5,838	102,666	2,117	.. 1975-76
289,740	10,286	7,718	2,065	30,615	5,845	111,248	2,121	.. 1976-77
323,258	10,977	10,871	2,224	32,194	5,944	98,230	2,211	.. 1977-78
337,127	14,442	14,110	2,511	44,245	6,358	104,881	2,396	.. 1978-79
383,011	20,550	19,786	2,647	44,746	6,755	123,050	2,440	.. 1979-80
438,454	24,182	22,548	2,817	53,761	6,543	123,220	2,614	.. 1980-81
362,682	28,809	27,234	3,154	57,146	6,324	125,422	2,805	.. 1981-82
421,871	26,805	28,602	3,183	61,362	5,961	110,941	2,690	.. 1982-83

cotton, 4,913 hectares, 3,785(000) kilograms.

(c) Figures from 1971-72 include area of pasture cut for hay.

(d) Figures for the years

1900-01 to 1963-64 were compiled by the Cotton Marketing Board.

(e) Figures from 1971-72 include areas of pasture harvested for seed

and cut for hay.

SUMMARY OF MINERAL, TIMBER, AND

Year	Mining and quarrying production (a)							
	Approximate metal content						Coal	Mineral sands concentrates
	Gold	Silver	Lead	Copper	Tin	Zinc		
	kg	kg	tonnes	tonnes	tonnes	tonnes	'000 tonnes	tonnes
1860 ..	85	..	..	1	..	..	13	..
1865 ..	543	..	..	733	..	..	34	..
1870 ..	2,863	..	..	1,356	..	..	23	..
1875 ..	8,763	..	..	1,701	3,183	..	33	..
1880 ..	6,919	n.a.	n.a.	331	2,025	..	59	..
1885 ..	7,780	n.a.	n.a.	1,362	2,314	..	213	..
1890 ..	15,982	n.a.	n.a.	188	2,112	..	344	..
1895 ..	15,747	6,999	369	441	1,504	..	328	..
1900 ..	21,027	3,514	208	390	799	..	505	..
1905 ..	18,433	18,715	2,461	7,337	2,806	..	538	..
1910 ..	13,729	26,786	2,430	16,650	2,100	..	885	..
1915 ..	7,767	7,457	494	20,020	1,512	..	1,041	..
1920 ..	4,828	8,530	1,736	16,152	1,057	..	1,128	..
1925 ..	1,443	11,990	5,319	3,972	719	174	1,196	..
1930 ..	243	2,171	235	2,977	429	—	1,112	..
1935 ..	3,203	74,933	33,481	2,947	845	4,482	1,069	..
1940 ..	3,945	135,793	48,890	7,019	904	30,059	1,306	..
1945 ..	1,966	3,506	—	15,248	661	—	1,661	13,629
1950 ..	2,745	91,464	39,802	5,330	610	26,214	2,358	14,946
1951 ..	2,444	85,994	33,607	4,803	345	22,092	2,513	20,019
1952 ..	(a) 2,667	(a) 100,261	(a) 41,448	(a) 7,078	(a) 335	(a) 24,063	(a) 2,786	(a) 24,491
1953 ..	2,858	92,709	37,606	24,339	297	20,281	2,557	28,249
1954 ..	3,047	111,468	42,089	27,644	742	19,930	2,805	36,559
1955 ..	2,001	136,720	49,597	32,369	782	17,413	2,791	42,836
1956 ..	1,742	116,062	43,796	36,281	640	16,491	2,779	54,163
1957 ..	1,971	133,928	52,092	36,360	784	19,849	2,745	73,649
1958 ..	2,319	177,602	66,855	51,322	1,035	17,765	2,622	61,320
1959 ..	2,852	154,062	55,288	67,870	1,122	14,207	2,636	71,659
1960 ..	2,434	159,303	58,441	84,081	899	24,785	2,693	74,491
1961 ..	2,015	120,768	46,007	67,512	1,372	33,732	2,827	69,695
1962 ..	2,107	174,195	63,675	80,400	1,094	45,421	2,844	78,245
1963 ..	2,133	192,906	67,782	84,557	1,215	37,943	3,296	101,958
1964 ..	3,139	173,297	62,921	75,931	1,517	38,180	3,841	96,329
1965 ..	2,394	144,189	50,470	61,375	1,195	31,472	4,221	106,325
1966 ..	4,330	192,582	66,593	73,809	1,719	44,288	4,739	133,176
1967 ..	2,974	212,507	77,666	52,283	1,675	51,853	4,754	162,006
1968-69 ..	2,396	332,563	138,048	82,314	1,147	98,330	7,514	193,322
1969-70 ..	2,424	391,420	152,752	95,339	1,275	111,185	9,540	314,345
1970-71 ..	2,497	367,190	148,507	122,595	1,013	108,455	11,074	288,784
1971-72 ..	2,583	288,127	123,939	121,848	1,070	110,498	14,068	200,360
1972-73 ..	1,742	292,884	122,149	135,283	1,342	117,525	18,842	171,974
1973-74 ..	2,158	313,998	131,763	177,652	1,556	119,739	19,898	224,873
1974-75 ..	1,380	361,598	141,616	168,153	1,681	133,100	23,845	253,452
1975-76 ..	1,329	380,867	151,167	156,566	1,692	131,704	24,182	228,826
1976-77 ..	1,212	488,761	172,663	156,392	1,454	120,853	25,544	195,099
1977-78 ..	990	469,109	163,185	160,234	2,061	120,315	25,416	129,018
1978-79 ..	635	476,217	157,629	173,839	2,030	127,956	26,507	128,319
1979-80 ..	480	427,786	151,060	169,646	2,725	122,620	27,233	191,954
1980-81 ..	901	405,775	139,656	169,953	2,999	115,593	32,356	161,810
1981-82 ..	824	454,876	170,914	175,236	3,147	152,122	34,276	142,395

(a) State Department of Mines figures up to 1951, mining census figures thereafter.

(b) From 1925 to 1967 the figures are for the financial

year ended 30 June following.

(c) Australian-grown only and excluding timber sawn and used in plywood and case mills.

(d) Commercial production. Prior to 1905 excluding edible fisheries production. From 1905 to 1971-72, edible fisheries production, pearls.

FISHERIES PRODUCTION STATISTICS

		Timber production (b)					Fisheries production (d)	Year
Bauxite	Total value at mine	Sawn timber (c)				Plywood and veneer		
		Pine		Other				
'000 tonnes	\$'000	cubic metres	\$'000	cubic metres	\$'000	\$'000	\$'000	
..	42	n.a.	n.a.	n.a.	n.a.	..	—	.. 1860
..	304	n.a.	n.a.	n.a.	n.a.	..	1	.. 1865
..	968	n.a.	n.a.	n.a.	n.a.	..	—	.. 1870
..	3,143	n.a.	n.a.	n.a.	n.a.	..	14	.. 1875
..	2,270	n.a.	n.a.	n.a.	n.a.	..	125	.. 1880
..	2,770	n.a.	n.a.	n.a.	n.a.	..	213	.. 1885
..	5,284	73,930	422	47,423	293	..	194	.. 1890
..	4,871	46,352	206	40,677	214	..	155	.. 1895
..	6,360	142,035	568	93,570	454	..	267	.. 1900
..	7,453	113,194	475	61,261	302	..	149	.. 1905
..	7,420	169,615	1,008	105,147	709	..	377	.. 1910
..	6,650	211,729	1,538	130,314	1,086	..	332	.. 1915
..	7,236	201,316	2,944	119,617	1,725	..	587	.. 1920
..	4,025	166,651	2,566	144,038	2,495	..	848	.. 1925
..	2,482	68,177	962	70,610	1,024	176	689	.. 1930
..	5,775	166,739	2,061	128,862	1,684	1,067	691	.. 1935
..	10,211	249,100	3,154	199,687	2,624	1,868	783	.. 1940
..	8,710	171,833	2,766	214,639	3,504	1,726	1,113	.. 1945
..	32,698	140,321	3,954	394,412	11,768	4,815	2,125	.. 1950
..	40,401	165,351	5,762	457,398	16,312	6,087	2,191	.. 1951
..	(a) 34,858	168,508	6,186	459,600	18,002	5,360	2,208	.. 1952
..	34,568	181,215	7,046	443,389	18,544	7,934	2,441	.. 1953
..	43,205	155,931	6,614	419,097	18,552	9,088	2,872	.. 1954
..	53,785	137,735	6,082	426,207	20,072	9,870	3,298	.. 1955
..	60,408	156,894	7,632	447,221	21,758	9,663	3,544	.. 1956
..	51,153	161,922	8,082	411,929	20,570	11,255	3,494	.. 1957
..	55,264	150,678	7,924	404,710	20,574	12,479	3,050	.. 1958
..	66,658	158,779	8,188	432,385	22,514	12,221	3,320	.. 1959
(e) 43	75,216	147,367	7,784	418,807	23,986	10,897	3,176	.. 1960
41	64,441	125,398	6,564	348,733	17,812	10,531	3,668	.. 1961
20	74,232	139,413	7,136	346,684	17,992	10,497	4,231	.. 1962
292	84,084	148,075	7,620	379,466	19,508	11,367	4,726	.. 1963
455	97,287	154,520	8,024	371,473	20,914	11,941	5,737	.. 1964
664	98,964	136,784	7,733	363,637	24,007	10,174	6,086	.. 1965
989	138,483	133,731	7,731	329,690	22,920	10,154	6,959	.. 1966
2,855	140,577	138,148	8,090	318,667	21,062	12,745	7,308	.. 1967
4,193	209,273	157,382	n.a.	334,540	n.a.	(f) 13,919	8,089	.. 1968-69
5,375	278,145	154,584	n.a.	343,474	n.a.	(f) 15,772	8,034	.. 1969-70
6,611	293,751	n.a.	n.a.	n.a.	n.a.	n.p.	10,985	.. 1970-71
8,009	318,835	161,708	n.a.	291,758	n.a.	n.p.	11,380	.. 1971-72
7,773	399,167	167,807	n.a.	285,424	n.a.	n.p.	(g) 12,112	.. 1972-73
9,005	583,483	154,752	n.a.	274,943	n.a.	23,834	(g) 14,553	.. 1973-74
10,849	802,878	170,095	n.a.	288,617	n.a.	12,636	(g) 11,828	.. 1974-75
8,831	988,583	156,824	n.a.	263,900	n.a.	n.p.	(h) 16,351	.. 1975-76
9,982	1,189,698	162,947	n.a.	297,175	n.a.	n.p.	(h) 33,677	.. 1976-77
8,957	1,191,570	157,090	n.a.	249,378	n.a.	n.p.	(h) 39,143	.. 1977-78
8,095	1,405,149	188,031	n.a.	250,037	n.a.	n.p.	58,214	.. 1978-79
9,377	1,852,466	203,981	n.a.	235,715	n.a.	n.p.	(h) 62,789	.. 1979-80
7,937	1,917,585	189,227	n.a.	246,103	n.a.	n.p.	(h) 86,292	.. 1980-81
8,705	2,089,831	189,288	n.a.	285,697	n.a.	n.p.	n.a.	.. 1981-82

pearl-shell, trochus-shell, and tortoise-shell, beche-de-mer, and whales. From 1972-73 edible fisheries production only. From 1925 to 1967 figures are for the financial year ending 30 June following. (e) Including production for years prior to 1960. (f) Sales and transfers.

(g) Excluding oysters.

(h) Excluding oysters and rock lobsters.

SUMMARY OF MANUFACTURING

Year	Manufacturing (a)						
	Establishments	Workers (b)			Salaries and wages paid (c)	Capital values (d)	
		Males	Females	Persons		Machinery and plant	Land and buildings
	No.	No.	No.	No.	\$'000	\$'000	\$'000
1860 ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1865 ..	47	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1870 ..	471	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1875 ..	575	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1880 ..	565	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1885 ..	1,069	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1890 ..	1,308	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1895 ..	1,384	n.a.	n.a.	18,554	n.a.	(h) 10,856	(h)
1900 ..	2,053	n.a.	n.a.	25,606	n.a.	8,062	6,410
1905 ..	1,890	n.a.	n.a.	21,389	n.a.	7,058	5,194
1910 ..	1,542	26,720	6,774	33,494	5,540	8,275	5,792
1915 ..	1,749	33,741	7,675	41,416	8,240	12,135	8,487
1920 ..	1,766	35,016	7,144	42,160	12,977	16,428	12,018
1925-26 ..	1,854	41,074	7,929	49,003	18,534	24,204	15,401
1930-31 ..	2,047	32,522	6,861	39,383	13,658	26,227	17,679
1935-36 ..	2,417	36,039	8,729	44,768	16,227	29,537	19,737
1940-41 ..	2,908	46,257	10,716	56,973	23,838	32,310	23,787
1945-46 ..	2,882	53,406	11,977	65,383	35,231	31,768	26,933
1950-51 ..	4,715	76,666	17,466	94,132	83,982	55,170	44,714
1951-52 ..	4,858	77,214	16,810	94,024	101,666	66,068	52,786
1952-53 ..	5,000	76,571	15,601	92,172	112,440	77,741	62,295
1953-54 ..	5,129	80,251	16,759	97,010	124,056	91,774	70,844
1954-55 ..	5,209	82,101	17,124	99,225	133,635	105,799	78,427
1955-56 ..	5,305	83,877	17,532	101,409	141,703	118,784	89,404
1956-57 ..	5,465	84,373	17,561	101,934	151,915	125,585	99,751
1957-58 ..	5,452	83,607	17,136	100,743	154,235	139,037	108,998
1958-59 ..	5,572	86,083	17,420	103,503	167,072	146,348	117,545
1959-60 ..	5,681	85,605	17,938	103,543	174,626	160,626	131,017
1960-61 ..	5,809	85,278	18,162	103,440	179,907	180,134	145,410
1961-62 ..	5,756	82,559	17,570	100,129	182,035	185,241	153,225
1962-63 ..	5,828	85,028	18,586	103,614	191,196	191,586	167,573
1963-64 ..	5,887	89,772	19,695	109,467	213,916	206,720	183,947
1964-65 ..	5,899	93,738	20,989	114,727	247,061	254,478	201,675
1965-66 ..	5,948	94,204	21,419	115,623	262,437	364,490	238,249
1966-67 ..	5,956	93,945	21,839	115,784	276,093	477,149	257,619
1967-68 ..	6,099	95,952	22,809	118,761	299,768	481,555	277,643
1968-69 (i) ..	4,032	88,546	21,686	110,232	309,276	n.a.	n.a.
1969-70 ..	3,847	88,408	22,101	110,509	332,119	n.a.	n.a.
1970-71 ..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1971-72 ..	4,001	91,241	23,127	114,368	425,939	n.a.	n.a.
1972-73 ..	4,212	92,861	23,484	116,345	483,447	n.a.	n.a.
1973-74 ..	4,290	93,777	24,783	118,560	596,419	n.a.	n.a.
1974-75 ..	4,250	92,034	22,845	114,879	739,177	n.a.	n.a.
1975-76 (n) ..	3,122	92,289	21,936	114,225	874,056	n.a.	n.a.
1976-77 ..	3,001	90,975	21,782	112,757	981,583	n.a.	n.a.
1977-78 ..	2,838	90,315	21,396	111,711	1,034,588	n.a.	n.a.
1978-79 ..	2,886	91,200	21,759	112,959	1,125,060	n.a.	n.a.
1979-80 ..	3,170	93,636	21,970	115,606	1,253,012	n.a.	n.a.
1980-81 ..	3,291	94,319	21,796	116,115	1,410,213	n.a.	n.a.
1981-82 ..	3,556	99,429	23,288	122,717	1,700,379	n.a.	n.a.

(a) Excluding 'heat, light, and power'. (b) Average number of workers employed during period each factory was operating up to 1964-65, thereafter average number employed over the whole year. (c) Excluding drawings of working proprietors. (d) Book values, less any depreciation reserve. (e) Output, less value of goods consumed in process of production. (f) Electricity and gas works. (g) Valued at prices paid by consumers. (h) Value of land and buildings included with machinery and plant. (i) Direct comparisons with figures prior to 1968-69 are not possible because of changes in the census units, the scope of the censuses, and the items of data.

INDUSTRY STATISTICS

		Heat, light, and power (f)						
Output	Pro- duction (e)	Generating works					Sales of electricity and gas (g)	Year
		Establish- ments	Workers (b)	Salaries and wages paid (c)	Machinery and plant (d)	Land and buildings (d)		
\$'000	\$'000	No.	No.	\$'000	\$'000	\$'000	\$'000	
n.a.	n.a.	..	..	..	..	..	..	.. 1860
n.a.	n.a.	..	..	..	..	..	..	.. 1865
n.a.	n.a.	1	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1870
n.a.	n.a.	3	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1875
n.a.	n.a.	6	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1880
n.a.	n.a.	10	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1885
n.a.	n.a.	14	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1890
9,166	n.a.	13	144	n.a.	(h) 551	(h)	132	.. 1895
15,602	n.a.	25	347	n.a.	947	159	231	.. 1900
15,924	n.a.	21	316	n.a.	918	226	337	.. 1905
31,154	n.a.	21	450	122	988	300	430	.. 1910
49,769	17,465	26	663	213	1,967	405	1,121	.. 1915
77,864	28,576	29	1,036	460	2,803	504	1,703	.. 1920
89,143	31,760	43	1,493	720	6,249	910	2,658	.. 1925-26
77,774	24,723	57	1,091	538	5,973	1,031	3,072	.. 1930-31
92,713	29,627	65	1,073	563	5,936	1,292	3,159	.. 1935-36
137,402	41,646	64	814	490	4,694	1,402	5,072	.. 1940-41
177,479	58,211	63	1,148	794	5,612	1,730	7,474	.. 1945-46
421,241	147,540	61	1,444	1,691	13,300	3,202	16,784	.. 1950-51
485,215	178,610	60	1,495	2,147	16,512	4,434	21,396	.. 1951-52
572,361	190,045	68	1,618	2,741	25,598	7,145	26,456	.. 1952-53
642,877	212,529	70	1,744	2,809	36,545	9,161	30,558	.. 1953-54
688,082	231,721	75	1,740	2,964	46,935	13,947	34,106	.. 1954-55
720,054	248,661	73	1,915	3,217	52,770	15,801	35,446	.. 1955-56
767,110	266,828	72	1,932	3,644	54,222	17,557	40,306	.. 1956-57
783,326	275,564	76	1,970	3,681	70,161	18,857	44,554	.. 1957-58
870,699	297,157	79	1,996	3,923	78,709	20,445	48,176	.. 1958-59
904,499	309,452	77	1,980	4,108	79,796	21,687	50,622	.. 1959-60
948,644	325,123	73	1,975	4,412	85,005	22,906	55,118	.. 1960-61
957,129	334,569	68	1,980	4,656	89,261	26,039	58,032	.. 1961-62
1,089,319	361,009	67	1,999	4,635	88,999	25,911	60,190	.. 1962-63
1,249,739	420,673	68	2,005	4,846	101,587	27,573	61,710	.. 1963-64
1,293,466	455,351	63	1,940	5,297	95,840	31,877	68,657	.. 1964-65
1,460,031	518,688	62	1,958	5,609	112,968	35,310	74,058	.. 1965-66
1,568,173	566,488	57	2,153	6,116	124,244	37,043	78,910	.. 1966-67
1,722,249	626,696	55	2,091	6,187	149,675	37,855	88,365	.. 1967-68
(j) 1,868,803	(k) 659,897	30	(l) 8,996	31,758	n.a.	n.a.	(m) 157,816	(i) 1968-69
2,021,793	712,857	28	9,239	34,063	n.a.	n.a.	167,571	.. 1969-70
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1970-71
2,433,420	870,782	28	9,544	47,154	n.a.	n.a.	205,939	.. 1971-72
2,844,833	1,012,595	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1972-73
3,260,936	1,220,174	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1973-74
4,074,967	1,618,730	28	9,549	81,870	n.a.	n.a.	335,789	.. 1974-75
4,564,221	1,800,088	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(n) 1975-76
5,261,290	1,991,434	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1976-77
5,525,413	2,090,444	18	10,617	122,809	n.a.	n.a.	652,748	.. 1977-78
6,590,922	2,322,426	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.. 1978-79
8,303,657	2,692,294	17	11,674	157,172	n.a.	n.a.	912,129	.. 1979-80
9,666,541	3,074,868	18	12,482	187,207	n.a.	n.a.	887,159	.. 1980-81
10,590,192	3,448,170	18	13,297	226,426	n.a.	n.a.	1,010,448	.. 1981-82

(j) Turnover, i.e. sales of goods plus transfers out and other operating revenue. (k) Value added, i.e. turnover plus increase (or less decrease) in value of stocks less purchases, transfers in, and selected expenses. (l) Number on payroll on pay day nearest 30 June, including administration and distribution staff. (m) Turnover, i.e. sales of electricity and gas and other operating revenue. (n) From 1975-76, excludes single-establishment enterprises with fewer than four persons employed.

SUMMARY OF EXTERNAL

Year	Imports (a)		Exports (a)		Wool (c)	
	Overseas	Interstate	Overseas (b)	Interstate		
	\$'000	\$'000	\$'000	\$'000	'000 kg	\$'000
1860	115	1,352	1	1,044	..	..
1865	1,444	3,478	491	1,816	1,138	396
1870	875	2,267	1,336	3,731	8,070	1,019
1875	2,781	3,727	2,040	5,656	7,968	1,569
1880	2,052	4,113	1,836	5,055	7,822	1,361
1885	6,152	5,976	3,470	6,975	18,712	2,739
1890	5,189	4,312	4,929	12,144	21,704	3,644
1895	5,496	4,000	7,266	10,674	25,957	3,117
1900	8,199	5,446	8,264	10,825	17,123	2,571
1905	6,313	6,195	6,697	17,006	16,022	2,655
1910	10,856	n.a.	16,258	n.a.	46,450	8,357
1915-16	14,002	n.a.	16,212	n.a.	38,627	7,844
1920-21	23,681	n.a.	30,341	n.a.	45,892	12,434
1925-26	27,546	n.a.	47,170	n.a.	79,770	25,888
1930-31	11,342	n.a.	32,478	n.a.	76,986	13,350
1935-36	15,726	40,588	39,104	28,714	63,911	15,741
1940-41	14,453	53,810	50,490	44,138	55,364	15,361
1945-46	24,493	66,697	54,169	48,470	73,881	24,261
1950-51	134,799	174,747	320,564	91,888	83,915	206,123
1951-52	172,853	198,026	191,814	105,428	67,276	107,505
1952-53	86,443	197,486	290,190	113,230	68,194	112,280
1953-54	111,254	287,345	330,205	150,764	86,979	142,716
1954-55	137,766	307,621	308,960	156,089	81,072	114,040
1955-56	123,460	322,891	304,276	181,178	79,196	96,834
1956-57	97,768	360,704	380,754	206,323	110,255	170,827
1957-58	98,994	403,526	312,966	192,177	100,391	133,535
1958-59	95,474	407,565	339,927	207,390	94,032	91,687
1959-60	101,717	470,255	362,585	231,521	115,052	126,237
1960-61	122,554	455,211	327,555	240,025	106,996	108,345
1961-62	97,723	443,304	344,885	235,664	110,550	116,037
1962-63	134,233	552,605	404,980	269,785	106,345	119,548
1963-64	161,683	665,970	544,977	300,486	113,975	146,880
1964-65	199,516	723,730	488,222	324,606	111,140	127,479
1965-66	(e) 240,349	700,526	462,596	382,732	97,188	106,703
1966-67	193,677	710,084	499,967	385,436	84,494	93,153
1967-68	(f) 236,768	774,269	562,928	405,750	98,141	98,828
1968-69	288,599	859,021	677,456	495,501	103,674	109,197
1969-70	294,102	935,694	773,519	547,784	91,104	85,309
1970-71	(g) 321,638	998,732	789,180	530,924	63,625	47,339
1971-72	270,484	1,058,040	980,954	524,300	68,804	50,233
1972-73	(h) 311,448	1,201,620	(i) 1,305,569	586,002	73,187	104,231
1973-74	(j) 542,646	1,395,836	1,380,764	725,260	51,271	108,790
1974-75	580,051	1,424,004	2,046,407	683,805	46,226	62,676
1975-76	634,893	1,673,843	2,322,021	727,377	54,030	77,534
1976-77	835,771	2,156,864	2,815,608	972,090	67,772	122,965
1977-78	887,179	2,386,429	2,821,362	1,114,078	43,780	87,204
1978-79	1,028,010	2,865,974	3,300,109	1,412,182	53,315	112,393
1979-80	1,321,062	3,272,286	4,261,697	1,596,660	50,674	124,007
1980-81	1,882,815	3,813,455	4,501,290	1,750,529	36,743	102,958
1981-82	2,179,752	4,502,960	4,414,453	1,888,993	38,362	112,169
1982-83	1,994,608	4,440,625	4,470,871	1,863,332	37,347	104,681

(a) Excluding specie.

(b) From July 1978 recorded on a 'State of origin' basis, not on a 'State of final shipment' basis as previously.

(c) Including the equivalent, in terms of greasy wool, of wool exported after scouring or carbonising; but excluding noils and wool waste prior to 1964-65.

(d) Chiefly refined sugar.

(e) Including import of a naval vessel valued at \$38.9m.

(f) Including import of a naval

TRADE STATISTICS

Overseas exports (b)							Year
Butter		Meat	Sugar		Coal		
'000 kg	\$'000	\$'000	tonnes	\$'000	tonnes	\$'000	
..	..	..	..	..	226	—	.. 1860
..	..	..	..	..	2	—	.. 1865
..	..	23	..	..	252	1	.. 1870
..	..	5	(d) 314	18	2,843	4	.. 1875
..	..	46	(d) 161	8	2,735	4	.. 1880
..	..	85	(d) 1,533	56	18,094	22	.. 1885
2	—	278	(d) 2,048	74	43,639	63	.. 1890
16	2	1,922	(d) 7,710	229	1,185	5	.. 1895
469	78	2,697	(d) 5,056	137	12,759	20	.. 1900
3,207	581	1,320	221	5	8,411	8	.. 1905
7,808	1,503	3,288	27	1	700	1	.. 1910
1,068	272	5,533	5	—	35	—	.. 1915-16
11,824	5,928	7,446	1	—	98,365	243	.. 1920-21
16,605	4,809	6,914	198,604	4,413	2,089	4	.. 1925-26
30,655	7,063	5,288	210,529	3,869	30,971	51	.. 1930-31
34,577	7,623	5,367	304,583	5,480	1,172	2	.. 1935-36
34,098	9,163	11,081	378,485	9,668	n.a.	n.a.	.. 1940-41
27,920	10,945	8,487	139,887	5,300	n.a.	n.a.	.. 1945-46
25,192	16,983	26,560	387,928	28,967	n.a.	n.a.	.. 1950-51
2,006	1,768	23,906	163,094	13,043	n.a.	n.a.	.. 1951-52
26,759	21,481	50,502	460,667	42,529	n.a.	n.a.	.. 1952-53
19,025	15,395	57,197	710,393	62,336	11,884	111	.. 1953-54
21,680	17,696	60,007	742,475	61,547	20	—	.. 1954-55
27,978	19,148	59,325	594,678	48,598	108	2	.. 1955-56
18,929	11,154	54,140	679,068	56,552	10,870	184	.. 1956-57
11,498	6,327	45,672	714,510	69,314	17,512	156	.. 1957-58
22,965	13,678	87,625	810,960	63,771	28	1	.. 1958-59
21,209	15,132	78,841	706,144	52,793	46,117	422	.. 1959-60
11,166	6,737	59,581	799,945	69,322	51,915	358	.. 1960-61
14,552	7,670	78,663	846,684	66,965	303,384	2,334	.. 1961-62
13,087	6,924	93,312	1,152,995	89,823	233,709	2,008	.. 1962-63
15,984	8,880	104,061	1,124,674	154,616	816,697	7,450	.. 1963-64
13,825	9,214	118,206	1,279,558	111,632	1,201,447	10,684	.. 1964-65
9,864	6,360	116,073	1,258,657	92,819	1,648,387	14,523	.. 1965-66
12,149	7,158	118,533	1,645,675	98,113	1,702,578	14,822	.. 1966-67
8,638	5,245	117,850	1,601,555	95,616	2,307,245	21,336	.. 1967-68
1,972	1,199	131,589	2,047,013	116,253	3,959,705	33,700	.. 1968-69
2,136	1,189	160,988	1,352,409	110,993	5,569,019	53,194	.. 1969-70
1,815	1,079	168,122	1,541,336	145,216	6,862,875	73,228	.. 1970-71
3,726	3,597	211,746	1,974,163	206,241	8,993,729	99,534	.. 1971-72
3,827	3,376	323,559	2,062,841	245,459	14,503,770	159,751	.. 1972-73
3,879	3,489	297,261	1,761,037	217,870	15,420,141	193,758	.. 1973-74
2,880	3,295	173,048	1,971,295	632,846	17,443,235	374,715	.. 1974-75
2,554	2,795	253,732	1,975,996	561,335	15,423,983	586,432	.. 1975-76
1,442	1,777	314,108	2,532,195	629,991	18,526,027	749,651	.. 1976-77
1,506	1,987	380,465	2,449,713	528,213	20,177,112	848,201	.. 1977-78
1,536	1,897	634,141	1,827,107	444,160	19,296,373	814,935	.. 1978-79
1,771	2,429	664,362	2,188,121	661,387	20,972,102	920,502	.. 1979-80
609	1,130	553,898	2,545,586	1,136,206	23,210,246	1,059,506	.. 1980-81
1,850	5,566	553,095	2,496,840	758,026	24,133,591	1,239,237	.. 1981-82
1,725	5,324	621,851	2,541,843	554,668	25,853,432	1,563,687	.. 1982-83

vessel valued at \$9.7m.

(g) Including military and civilian aircraft valued at \$56.1m.

(h) Including military and civilian aircraft

valued at \$40.7m.

(i) Including military and civilian aircraft valued at \$39.0m.

(j) Including military and civilian aircraft valued at

\$142.1m.

SUMMARY OF

Year	Raw sugar production				Butter	
	Average net price per tonne (a)			Proportion of Australian production exported	Return to manufacturer (b) per tonne	Proportion sold overseas
	Australian sales	Overseas sales	Total pooled sugar			
	\$	\$	\$	%	\$	%
1860 .. ..	..	..	..	..	..	..
1865	n.a.	..	n.a.	..	..	..
1870	n.a.	..	n.a.	..	..	..
1875-76	n.a.	..	n.a.	..	..	..
1880-81	n.a.	..	n.a.	..	..	..
1885-86	n.a.	..	n.a.	..	..	..
1890-91	n.a.	..	n.a.	..	..	..
1895-96	18.95	..	18.95	..	n.a.	1
1900-01	18.95	..	18.95	..	n.a.	12
1905-06	19.90	..	19.90	..	n.a.	35
1910-11	18.45	..	18.45	..	n.a.	55
1915-16	35.43	..	35.43	..	n.a.	56
1920-21	59.71	..	59.71	..	n.a.	14
1925-26	51.18	22.22	38.44	44	n.a.	58
1930-31	53.15	16.24	38.39	39	267.31	74
1935-36	47.24	15.63	31.86	48	231.88	70
1940-41	45.37	22.19	33.73	50	281.88	66
1945-46	43.11	33.25	39.97	32	402.15	58
1950-51	48.32	64.61	55.64	44	644.46	49
1951-52	66.34	72.38	67.66	21	844.64	15
1952-53	86.91	80.90	83.87	50	950.94	56
1953-54	94.34	76.16	83.45	58	964.91	43
1954-55	92.61	73.62	81.16	59	934.60	52
1955-56	92.32	75.93	83.30	53	917.08	60
1956-57	105.46	81.33	91.58	56	901.92	45
1957-58	106.59	90.22	96.93	57	890.51	44
1958-59	107.77	77.57	89.19	61	940.50	54
1959-60	111.07	79.35	93.33	55	946.80	58
1960-61	123.07	78.61	96.24	60	922.40	38
1961-62	122.98	74.15	94.47	58	907.44	51
1962-63	123.12	80.69	94.01	68	931.06	46
1963-64	120.07	129.41	126.19	65	941.49	45
1964-65	118.84	82.51	94.02	68	951.33	45
1965-66	120.02	66.17	83.24	67	910.98	45
1966-67	119.33	56.54	81.69	72	886.57	49
1967-68	140.54	58.43	82.07	73	901.73	37
1968-69	140.94	61.84	80.24	76	884.21	30
1969-70	140.84	79.50	97.75	70	858.42	31
1970-71	138.08	86.45	100.63	72	950.74	23
1971-72	136.51	99.27	108.35	75	1,014.52	28
1972-73	134.94	112.27	117.80	75	913.47	34
1973-74	132.40	129.58	130.39	71	887.04	18
1974-75	129.90	304.79	259.78	74	997.45	9
1975-76	126.20	276.88	236.13	73	984.26	8
1976-77	136.20	242.89	217.49	76	1,123.35	16
1977-78	149.90	198.95	187.45	77	n.a.	—
1978-79	190.10	220.69	212.65	74	n.a.	—
1979-80	236.60	302.50	285.31	74	n.a.	9
1980-81	253.80	411.05	375.56	77	n.a.	—
1981-82	264.60	278.57	275.41	77	n.a.	—
1982-83	293.10	201.92	222.51	77	n.a.	—

(a) Queensland sugar only, including 'excess' sugar.

(b) Overall return including subsidy or bounty from 1942-43 to 1974-75.

(c) On Brisbane wool market. Estimated on an average bale weight of 150 kg prior to 1925-26.

(d) For human consumption only.

Slaughtering in slaughterhouses estimated up to 1900-01.

(e) Average prices of livestock, Brisbane saleyards.

(f) Base: year

MARKETING STATISTICS

Wool	Meat				Export price index, Australia (f)	Year
Average price per kg (greasy) (c)	Livestock slaughtered (d)			Average price of bullocks (e)		
	Cattle (including calves)	Sheep (including lambs)	Pigs			
cents	'000	'000	'000	\$		
n.a.	18	57	2	n.a.	..	.. .. 1860
n.a.	61	178	5	n.a.	..	.. .. 1865
n.a.	67	529	7	n.a.	..	.. .. 1870
n.a.	89	342	10	n.a.	..	.. .. 1875-76
n.a.	128	454	13	n.a.	..	.. .. 1880-81
n.a.	195	711	20	n.a.	..	.. .. 1885-86
n.a.	216	951	29	n.a.	..	.. .. 1890-91
n.a.	510	2,110	87	n.a.	..	.. .. 1895-96
11.18	503	861	129	n.a.	..	.. .. 1900-01
18.17	219	598	187	n.a.	..	.. .. 1905-06
18.67	379	1,751	169	n.a.	..	.. .. 1910-11
21.58	653	1,316	216	n.a.	..	.. .. 1915-16
22.27	449	461	158	n.a.	..	.. .. 1920-21
30.67	776	635	310	n.a.	..	.. .. 1925-26
17.04	647	1,671	408	n.a.	19	.. .. 1930-31
25.60	857	971	552	15.78	25	.. .. 1935-36
24.36	1,117	1,273	703	22.14	28	.. .. 1940-41
29.17	798	1,465	472	30.03	39	.. .. 1945-46
260.39	1,181	745	460	61.52	173	.. .. 1950-51
154.35	1,029	829	370	81.28	125	.. .. 1951-52
163.23	1,273	1,076	400	75.25	128	.. .. 1952-53
158.94	1,366	1,081	461	81.87	125	.. .. 1953-54
133.86	1,430	1,009	499	80.45	114	.. .. 1954-55
122.79	1,502	1,186	459	72.92	105	.. .. 1955-56
154.49	1,641	1,270	438	73.08	117	.. .. 1956-57
119.55	1,542	1,378	462	81.38	102	.. .. 1957-58
92.53	1,883	1,633	521	95.88	90	.. .. 1958-59
105.13	1,527	2,113	530	114.22	(f) 100	.. .. 1959-60
98.12	1,469	2,924	554	118.24	95	.. .. 1960-61
99.99	1,584	2,417	597	95.22	96	.. .. 1961-62
111.18	1,804	2,125	604	98.39	101	.. .. 1962-63
124.08	1,857	2,407	606	111.62	114	.. .. 1963-64
105.43	1,960	2,933	623	116.07	105	.. .. 1964-65
106.92	1,888	2,769	640	133.11	107	.. .. 1965-66
103.47	1,677	2,154	666	141.68	105	.. .. 1966-67
95.89	1,664	2,491	735	149.65	100	.. .. 1967-68
99.71	1,823	2,724	800	152.58	102	.. .. 1968-69
82.68	1,680	2,937	757	156.05	103	.. .. 1969-70
60.84	1,590	2,906	742	163.57	101	.. .. 1970-71
73.37	1,708	3,418	794	172.69	104	.. .. 1971-72
178.30	2,004	2,453	964	206.73	134	.. .. 1972-73
176.43	1,740	1,321	829	211.03	160	.. .. 1973-74
126.80	2,046	1,279	634	97.61	(g) 100	.. .. 1974-75
139.91	2,521	1,400	667	124.90	109	.. .. 1975-76
174.73	2,829	1,506	703	150.46	122	.. .. 1976-77
185.76	3,148	1,480	747	147.76	128	.. .. 1977-78
205.51	3,296	1,442	721	322.02	144	.. .. 1978-79
239.06	2,606	1,378	813	409.28	174	.. .. 1979-80
264.26	2,148	1,332	838	393.42	185	.. .. 1980-81
259.02	2,610	1,300	812	332.41	187	.. .. 1981-82
265.25	2,454	1,359	863	412.75	203	.. .. 1982-83

1959-60 = 100. Items and weights were revised and the new and original series linked at June 1969. Replaces previous index which had a base of 1959-60 = 100.

(g) Base: year 1974-75 = 100.

SUMMARY OF PRICES

Year	Wholesale price index numbers, Brisbane (a) (building materials)		Retail price index numbers,			
	Materials used in house building (all groups)	Materials used in building other than house building (all groups)	Food	Clothing	Housing (d)	Household equipment and operation (d)
1910-11 .. ..	..	..	..	..	..	..
1915-16 .. ..	..	..	7.6	5.8	..	..
1920-21 .. ..	..	..	9.8	10.6	..	..
1925-26 .. ..	..	..	8.5	8.7	..	..
1930-31 .. ..	..	..	6.9	7.4	..	..
1935-36 .. ..	..	..	6.9	6.4	..	..
1940-41 .. ..	..	..	7.9	8.7	..	..
1941-42 .. ..	..	..	8.2	10.3	..	..
1942-43 .. ..	..	..	8.5	11.6	..	..
1943-44 .. ..	..	..	8.5	12.2	..	..
1944-45 .. ..	..	..	8.5	12.2	..	..
1945-46 .. ..	..	..	8.5	12.2	..	..
1946-47 .. ..	..	..	8.8	12.9	..	..
1947-48 .. ..	..	..	9.8	13.8	..	..
1948-49 .. ..	..	..	(c) 11.6	(c) 15.4	12.7	21.9
1949-50 .. ..	..	..	12.5	17.7	13.9	23.2
1950-51 .. ..	..	..	14.1	20.4	15.2	25.5
1951-52 .. ..	..	..	18.6	24.5	16.8	29.7
1952-53 .. ..	..	..	20.6	26.0	18.9	31.9
1953-54 .. ..	..	..	21.3	26.3	19.2	32.5
1954-55 .. ..	..	..	21.4	26.4	19.8	32.7
1955-56 .. ..	..	..	22.2	26.6	20.9	32.7
1956-57 .. ..	..	..	22.9	27.3	22.4	34.0
1957-58 .. ..	..	..	23.3	28.1	23.5	34.5
1958-59 .. ..	..	..	24.7	28.5	24.3	34.8
1959-60 .. ..	..	..	25.6	29.2	25.1	35.3
1960-61 .. ..	..	..	26.8	30.0	26.1	35.5
1961-62 .. ..	..	..	26.9	30.4	26.6	36.0
1962-63 .. ..	..	..	26.7	30.5	27.3	36.0
1963-64 .. ..	..	..	27.4	30.7	27.5	35.6
1964-65 .. ..	..	..	29.1	31.1	28.2	36.0
1965-66 .. ..	..	..	31.1	31.5	30.0	36.7
1966-67	100.0	100.0	31.6	32.2	30.8	37.2
1967-68	103.4	102.2	32.7	33.0	32.6	37.9
1968-69	105.6	105.1	33.1	33.6	33.8	39.1
1969-70	109.4	110.3	34.0	34.6	34.9	39.6
1970-71	115.2	116.4	35.8	36.0	36.4	40.8
1971-72	124.8	124.4	37.6	38.0	39.7	42.8
1972-73	133.8	130.4	40.3	40.4	42.1	44.6
1973-74	152.2	149.0	48.1	45.7	46.3	48.6
1974-75	187.0	186.6	52.0	55.2	54.4	58.2
1975-76	218.5	216.3	57.1	64.4	62.5	67.5
1976-77	243.5	241.2	63.7	74.2	72.7	73.5
1977-78	265.1	260.9	70.3	82.0	80.4	79.4
1978-79	281.3	278.6	77.6	87.8	85.8	85.0
1979-80	315.0	(i) 100.0	89.8	93.8	91.6	90.5
1980-81	363.7	113.2	100.0	100.0	100.0	100.0
1981-82	407.2	126.3	109.2	108.2	113.0	110.2
1982-83	448.0	142.2	119.6	116.3	128.0	122.1

(a) Base of each index, 1966-67 = 100.0. (b) Base of each index, 1980-81 = 100.0. (c) "C" Series Index numbers are shown to 1947-48; thereafter Consumer Price Index numbers are shown. There is no direct line of continuity between the two indexes and the group headings are comparable only in a broad sense (see Chapter 21, Prices). (d) Not available prior to 1948-49. (e) Not available prior to 1966-67. (f) Base, June 1976 = 100.0. Index numbers are based on rates ruling at mid-point of financial year shown. (g) The

AND WAGES STATISTICS

Brisbane (b) (c)		Indexes of adult weekly basic wage rates, Brisbane (f)			Award rate of pay index (f) (h), adult males, Queensland	Year
Transportation (e)	All groups	Commonwealth awards (g)	State awards			
		Males	Males	Females		
..	..	..	..	..	3.7	.. .. 1910-11
..	7.8	..	..	..	4.1	.. .. 1915-16
..	11.3	..	..	..	6.8	.. .. 1920-21
..	10.0	8.2	13.8	8.9	7.5	.. .. 1925-26
..	8.7	7.5	12.5	8.2	6.9	.. .. 1930-31
..	8.4	6.8	12.0	8.1	6.6	.. .. 1935-36
..	10.0	8.4	13.6	9.4	(h) 7.5	.. .. 1940-41
..	10.7	8.9	14.4	10.0	7.9	.. .. 1941-42
..	11.3	9.7	15.2	10.7	8.4	.. .. 1942-43
..	11.3	9.9	15.7	11.3	8.7	.. .. 1943-44
..	11.3	9.9	15.7	11.3	8.8	.. .. 1944-45
..	11.6	9.9	15.7	11.3	8.8	.. .. 1945-46
..	12.0	10.7	17.0	12.6	9.5	.. .. 1946-47
..	12.6	11.2	17.7	13.4	10.1	.. .. 1947-48
..	(c) 13.9	12.2	19.3	15.1	11.5	.. .. 1948-49
..	15.1	13.3	20.9	16.5	12.4	.. .. 1949-50
..	16.9	16.4	25.0	21.3	14.6	.. .. 1950-51
..	20.6	19.7	30.0	25.6	17.2	.. .. 1951-52
..	22.5	23.0	35.0	30.0	19.3	.. .. 1952-53
..	22.9	23.2	36.0	31.0	19.8	.. .. 1953-54
..	23.1	23.2	36.5	31.4	20.6	.. .. 1954-55
..	23.9	23.2	37.1	32.0	21.2	.. .. 1955-56
..	25.2	24.3	39.1	33.8	22.7	.. .. 1956-57
..	25.7	25.3	39.1	33.8	22.8	.. .. 1957-58
..	26.5	25.9	41.5	36.1	23.8	.. .. 1958-59
..	27.2	27.4	43.3	37.8	25.0	.. .. 1959-60
..	28.2	27.4	44.7	39.7	26.2	.. .. 1960-61
..	28.6	28.7	46.0	44.3	26.9	.. .. 1961-62
..	28.7	28.7	46.0	44.3	26.9	.. .. 1962-63
..	29.0	28.7	46.4	44.6	27.7	.. .. 1963-64
..	30.1	30.9	49.6	47.7	29.4	.. .. 1964-65
..	31.5	30.9	50.9	49.0	31.2	.. .. 1965-66
31.9	32.3	33.0	53.0	51.0	32.6	.. .. 1966-67
32.9	33.4	(g) 38.0	55.4	53.8	34.1	.. .. 1967-68
34.0	34.1	39.5	57.6	56.7	36.7	.. .. 1968-69
34.5	35.1	43.2	59.4	58.3	38.9	.. .. 1969-70
38.1	36.9	43.2	59.4	58.3	41.2	.. .. 1970-71
40.8	39.3	47.4	64.5	63.4	47.1	.. .. 1971-72
41.9	41.6	52.4	66.5	66.2	51.2	.. .. 1972-73
45.8	47.3	62.0	75.5	76.3	59.7	.. .. 1973-74
54.6	54.6	70.5	83.0	83.5	82.3	.. .. 1974-75
63.7	61.7	86.3	91.2	91.6	90.9	.. .. 1975-76
70.0	70.5	104.9	106.3	107.5	104.2	.. .. 1976-77
74.5	77.1	117.0	122.0	126.0	114.6	.. .. 1977-78
81.9	83.4	125.2	130.5	134.7	123.2	.. .. 1978-79
91.9	91.5	129.3	134.7	139.1	128.3	.. .. 1979-80
100.0	100.0	140.7	146.5	151.4	144.7	.. .. 1980-81
112.2	110.7	151.2	167.6	173.2	165.3	.. .. 1981-82
124.7	122.9	151.2	197.6	211.6	189.4	.. .. 1982-83

Commonwealth Basic Wage was abolished in June 1967. The figures shown from 1967-68 are based on the Commonwealth Minimum Wage.

(h) Average minimum weekly wage rate index. From 1939-40 the series, previously unweighted, has been revised by weighting the numbers engaged in various occupations and by the exclusion of rural occupations. (i) Base year 1979-80 = 100.0. Replaces previous index which had a base of 1966-67 = 100.0.

SUMMARY OF PUBLIC

Year	State Government receipts					State Government expenditure		
	Taxation (all funds)	From Australian Government (a)	Total consoli- dated revenue fund (b)	Total trust funds (b)	All receipts (b)	Consoli- dated revenue fund (b)	Trust funds (b)	All expend- iture (b)
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1860	127	..	357	..	357	360	..	360
1865	442	..	945	86	1,031	898	21	919
1870	728	..	1,486	56	1,542	1,532	34	1,566
1875-76	1,208	..	2,527	116	2,643	2,630	84	2,714
1880-81	1,316	..	4,047	106	4,154	3,515	94	3,610
1885-86	2,459	..	5,737	234	5,970	6,180	302	6,482
1890-91	3,057	..	6,700	242	6,942	7,369	260	7,630
1895-96	3,134	..	7,283	567	7,850	7,136	527	7,663
1900-01	2,250	1,167	8,193	522	8,714	9,249	473	9,722
1905-06	1,012	1,714	7,707	848	8,555	7,451	1,030	8,482
1910-11	1,392	1,376	10,640	1,243	11,883	10,629	1,717	12,347
1915-16	2,922	1,667	15,413	2,630	18,043	15,343	3,925	19,268
1920-21	7,440	1,821	25,202	8,220	33,422	25,182	9,288	34,471
1925-26	8,694	2,436	31,200	13,518	44,717	32,309	14,581	46,890
1930-31	11,085	3,046	30,145	11,239	41,384	31,829	10,413	42,243
1935-36	14,646	3,374	30,978	15,198	46,176	32,462	14,857	47,319
1940-41	18,361	4,499	43,079	17,524	60,603	43,023	15,131	58,154
1945-46	18,968	5,566	49,549	23,362	72,911	49,519	21,441	70,960
1950-51	39,982	14,063	89,446	54,550	143,996	89,250	50,907	140,156
1951-52	47,184	21,198	111,506	70,776	182,282	111,415	70,850	182,266
1952-53	58,179	20,092	126,341	78,274	204,615	125,959	75,543	201,502
1953-54	64,148	22,442	139,392	89,051	228,444	138,706	77,057	215,763
1954-55	69,083	24,386	147,639	95,577	243,217	147,204	95,192	242,396
1955-56	74,484	23,684	151,337	100,634	251,972	154,784	112,840	267,624
1956-57	80,066	29,229	170,316	113,166	283,483	170,286	116,698	286,984
1957-58	86,580	34,980	175,911	127,355	303,266	178,940	122,322	301,262
1958-59	91,335	36,281	(d) 187,591	133,121	320,712	189,973	(d) 130,040	320,013
1959-60	115,393	27,131	(d) 203,824	142,898	346,722	204,154	(d) 144,356	348,510
1960-61	125,304	29,994	217,634	153,775	371,408	218,870	153,753	372,623
1961-62	136,009	38,784	234,650	172,477	407,128	234,431	169,613	404,043
1962-63	145,129	46,000	(d) 245,636	228,915	474,551	245,582	(d) 223,223	468,804
1963-64	155,403	48,073	260,897	249,765	510,662	260,454	243,689	504,144
1964-65	165,990	48,854	267,139	262,776	529,916	271,215	264,928	536,143
1965-66	181,660	60,662	294,502	289,627	584,129	298,022	288,701	586,723
1966-67	204,702	70,038	323,781	321,055	644,836	323,523	315,191	638,714
1967-68	232,685	76,301	(e) 376,987	355,120	(e) 732,107	(e) 376,017	348,442	(e) 724,459
1968-69	253,343	81,947	387,866	378,924	766,790	388,777	373,531	762,308
1969-70	281,306	104,191	441,074	445,278	886,352	444,618	438,071	882,689
1970-71	(f) 120,597	(f) 351,427	499,048	500,569	999,618	499,569	486,102	985,671
1971-72	168,904	403,162	595,218	581,696	1,176,913	592,506	556,955	1,149,461
1972-73	215,209	460,246	704,109	672,721	1,376,830	702,902	632,100	1,335,003
1973-74	267,946	581,830	853,676	849,734	1,703,410	855,184	802,940	1,658,125
1974-75	310,573	856,693	1,112,866	1,125,406	2,238,271	1,121,218	1,128,373	2,249,591
1975-76	397,131	1,132,545	1,349,513	1,471,173	2,820,686	1,348,799	1,344,237	2,693,036
1976-77	r 471,613	1,288,675	1,610,538	1,792,796	3,403,334	1,611,555	1,687,601	3,299,156
1977-78	r 500,380	r 1,468,570	1,815,953	1,881,173	3,697,126	1,816,863	1,754,292	3,571,155
1978-79	r 541,260	1,559,318	1,947,444	2,087,974	4,035,418	1,946,867	1,910,826	3,857,693
1979-80	r 603,884	1,710,571	2,206,954	2,263,384	4,470,338	2,207,893	2,143,272	4,351,165
1980-81	r 721,054	r 1,945,446	2,604,036	2,655,687	5,259,723	2,604,010	2,509,450	5,113,460
1981-82	917,061	2,203,701	3,276,756	3,361,952	6,638,708	3,276,926	3,119,235	6,396,161
1982-83	n.y.a.	2,515,400	3,690,187	4,275,359	7,965,546	3,690,956	3,958,567	7,649,523

(a) Including interest contributions from 1900-01, road grants from 1922-23, non-recurring grants from 1934-35, and grants for local public works from 1935-36. (b) Gross amounts, i.e. not adjusted for inter-fund transfers. (c) Prior to 1937-38 the figures are for the calendar year ended six months earlier than the year shown and up to 1923 include loan receipts. All receipts of business undertakings are

FINANCE STATISTICS

Gross loan expenditure	State gross public debt at 30 June					Local Government revenue (c)	Year
	Where payable		Total	Average rate of interest per \$100	Accumulated sinking fund		
	Australia	Overseas					
\$'000	\$'000	\$'000	\$'000	\$	\$'000	\$'000	
39	..	..	..	..	..	13	1860
1,370	248	2,016	2,263	2.29	..	107	1865
311	1,390	5,352	6,743	6.50	..	55	1870
1,200	3,912	8,986	12,899	4.75	..	174	1875-76
1,982	4,156	22,334	26,490	4.20	..	323	1880-81
3,846	4,418	37,224	41,642	3.90	..	1,112	1885-86
3,112	4,458	51,754	56,211	4.05	..	1,726	1890-91
1,184	6,160	59,864	66,025	3.90	..	1,024	1895-96
2,424	11,408	65,664	77,071	3.68	..	1,522	1900-01
595	14,460	70,110	84,570	3.70	..	1,412	1905-06
3,991	16,058	78,112	94,170	3.62	10	1,808	1910-11
6,124	21,700	95,766	117,466	3.77	518	3,458	1915-16
8,502	50,394	111,096	161,489	3.65	882	5,775	1920-21
9,944	72,602	132,298	204,899	4.78	2,816	6,236	1925-26
6,684	82,153	142,309	224,462	4.79	1,555	12,782	1930-31
10,140	104,596	140,677	245,272	4.11	1,579	15,798	1935-36
6,715	121,224	138,965	260,189	4.08	2,594	n.a.	1940-41
4,817	152,885	113,705	266,590	3.48	3,089	19,200	1945-46
35,695	234,094	98,220	332,314	3.18	102	36,212	1950-51
47,625	276,624	97,995	374,620	3.09	988	45,815	1951-52
44,008	310,903	97,607	408,510	3.19	1,668	53,229	1952-53
41,260	344,330	96,463	440,793	3.28	533	56,984	1953-54
40,996	377,471	95,478	472,949	3.47	615	n.a.	1954-55
43,810	409,979	95,620	505,599	3.55	434	n.a.	1955-56
46,252	443,235	95,405	538,639	3.71	214	68,608	1956-57
46,381	475,917	95,978	571,895	3.79	77	74,020	1957-58
53,863	507,318	99,622	606,940	3.88	283	81,419	1958-59
59,884	544,513	100,335	644,848	3.96	210	88,538	1959-60
60,672	581,565	103,334	684,900	4.18	301	95,197	1960-61
62,717	623,308	104,334	727,642	4.28	327	101,625	1961-62
64,262	661,225	108,856	770,081	4.26	641	112,859	1962-63
71,147	710,625	110,845	821,469	4.28	744	123,966	1963-64
79,104	771,706	107,986	879,691	4.41	664	134,567	1964-65
79,095	836,050	100,475	936,525	4.56	278	147,588	1965-66
82,600	947,522	64,140	1,011,662	4.71	423	159,599	1966-67
89,003	1,015,768	61,888	1,077,656	4.74	437	175,579	1967-68
93,950	1,090,887	57,933	1,148,820	4.82	2,658	194,591	1968-69
100,958	1,188,037	34,670	1,222,707	5.01	1,652	201,165	1969-70
103,332	1,244,181	33,018	1,277,199	5.24	1,726	227,077	1970-71
135,668	1,316,123	30,877	1,347,001	5.34	415	252,450	1971-72
146,104	1,398,540	25,957	1,424,497	5.34	1,212	302,142	1972-73
140,058	1,462,336	22,919	1,485,255	5.55	1,413	348,193	1973-74
202,792	1,423,397	17,626	1,441,023	6.21	1,482	433,939	1974-75
222,954	1,523,015	14,169	1,537,185	6.92	1,461	508,197	1975-76
247,739	1,628,434	13,272	1,641,706	7.13	5,891	610,995	1976-77
277,695	1,741,391	10,809	1,752,200	7.38	11,465	564,494	1977-78
270,899	1,847,854	5,571	1,853,425	7.49	10,239	606,740	1978-79
271,531	1,924,689	5,073	1,929,762	7.68	1,825	682,374	1979-80
276,779	2,017,296	4,352	2,021,649	8.27	2,280	796,638	1980-81
288,799	2,110,171	1,899	2,112,070	9.12	1,540	938,026	1981-82
297,681	2,196,256	1,645	2,197,901	9.77	1,439	n.y.a.	1982-83

included. (d) Excluding amounts transferred from Trust Funds to offset accumulated debit balances in the Consolidated Revenue Fund. (e) Including Australian Government loan of \$19,768,000 to the Sugar Board. (f) Financial Assistance Grants are included with Taxation to 1969-70. The figures shown from 1970-71 have been calculated using the classification described in Chapter 22, Public Finance, Section 3.

SUMMARY OF PRIVATE FINANCE STATISTICS

Year	Trading banks			Savings banks deposits at 30 June	Life insurance annual premiums (c)	Permanent building society loans Amount owing (d)	Balances outstanding (d)	
	Advances (a)	Deposits (a)	Weekly transactions (b)				Finance companies	Instalment credit for retail sales
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$m	\$m
1859-60	840	365	n.a.	(c) 15	n.a.	n.a.	n.a.	n.a.
1865-66	4,427	1,553	n.a.	(c) 179	n.a.	n.a.	n.a.	n.a.
1870-71	2,392	2,218	n.a.	(c) 814	n.a.	n.a.	n.a.	n.a.
1875-76	6,295	5,793	n.a.	(c) 1,284	n.a.	n.a.	n.a.	n.a.
1880-81	8,843	7,188	n.a.	(c) 1,889	n.a.	n.a.	n.a.	n.a.
1885-86	23,899	14,407	n.a.	(c) 2,676	n.a.	n.a.	n.a.	n.a.
1890-91	34,551	19,675	n.a.	(c) 3,322	n.a.	n.a.	n.a.	n.a.
1895-96	31,285	21,627	n.a.	4,659	n.a.	n.a.	n.a.	n.a.
1900-01	25,571	26,273	n.a.	7,792	n.a.	n.a.	n.a.	n.a.
1905-06	26,029	26,553	1,240	8,286	827	n.a.	n.a.	n.a.
1910-11	30,272	39,267	2,348	12,754	1,114	n.a.	n.a.	n.a.
1915-16	36,949	48,306	3,704	25,877	1,388	n.a.	n.a.	n.a.
1920-21	46,594	57,835	6,174	37,176	2,244	n.a.	n.a.	n.a.
1925-26	67,332	86,325	7,422	45,674	3,304	n.a.	n.a.	n.a.
1930-31	64,203	87,536	5,933	44,709	3,854	n.a.	n.a.	n.a.
1935-36	76,169	86,997	7,056	54,263	4,953	n.a.	n.a.	n.a.
1940-41	83,025	106,852	9,452	58,178	6,710	n.a.	n.a.	n.a.
1945-46	63,883	215,838	14,308	180,126	9,282	n.a.	n.a.	n.a.
1950-51	181,574	350,986	(b) 78,022	197,679	15,318	n.a.	n.a.	n.a.
1951-52	220,373	317,524	83,032	205,322	17,142	n.a.	n.a.	n.a.
1952-53	214,200	367,399	87,592	218,720	18,886	n.a.	n.a.	n.a.
1953-54	257,874	395,703	102,064	234,812	20,694	n.a.	n.a.	n.a.
1954-55	280,933	395,717	107,746	249,629	22,572	n.a.	n.a.	n.a.
1955-56	271,364	397,606	112,056	265,400	24,530	n.a.	n.a.	n.a.
1956-57	255,298	437,067	125,486	289,216	26,974	n.a.	n.a.	n.a.
1957-58	291,607	428,187	131,310	306,488	29,380	n.a.	n.a.	n.a.
1958-59	287,233	452,669	140,506	333,306	31,582	n.a.	n.a.	121.2
1959-60	313,808	478,348	158,344	365,172	34,864	n.a.	n.a.	152.2
1960-61	307,700	476,672	163,802	374,262	38,054	n.a.	n.a.	154.7
1961-62	315,838	506,096	164,362	411,704	41,290	n.a.	n.a.	150.4
1962-63	330,966	549,296	185,138	470,352	44,760	n.a.	n.a.	168.5
1963-64	348,036	625,318	213,200	542,352	49,217	26,154	n.a.	201.3
1964-65	403,520	667,820	232,886	593,026	54,700	28,872	252.2	230.5
1965-66	426,645	709,952	232,458	637,652	59,984	32,665	272.4	231.7
1966-67	450,930	754,469	256,850	700,029	66,135	37,819	300.6	234.1
1967-68	499,821	805,527	289,184	757,031	73,702	49,775	350.0	252.8
1968-69	534,284	871,805	325,320	818,999	78,298	70,130	385.6	266.0
1969-70	580,339	917,254	364,692	875,578	89,101	99,968	440.7	283.9
1970-71	615,440	979,133	404,983	943,333	101,847	130,228	505.5	304.0
1971-72	670,306	1,120,771	459,065	1,052,933	116,796	207,173	647.2	323.2
1972-73	929,789	1,566,586	597,490	1,319,853	134,290	339,370	959.9	363.9
1973-74	1,187,857	1,845,858	753,419	1,428,461	149,453	482,194	1,350.5	305.3
1974-75	1,247,595	2,148,915	817,878	1,618,206	170,486	537,572	1,309.5	320.9
1975-76	1,483,279	2,335,518	1,027,353	1,940,325	189,700	665,182	1,549.1	400.7
1976-77	1,678,170	2,712,593	1,230,668	2,148,693	206,700	744,409	1,875.0	474.8
1977-78	1,940,385	2,969,084	1,385,101	2,446,487	225,100	788,275	1,950.9	488.6
1978-79	2,145,494	3,393,030	1,517,684	2,713,304	242,400	960,124	2,084.3	504.9
1979-80	2,509,236	3,934,821	1,883,035	2,884,629	265,200	1,162,418	2,226.4	508.1
1980-81	2,817,772	4,896,333	2,356,038	3,232,292	n.a.	1,282,931	2,795.7	554.1
1981-82	3,308,742	5,590,273	3,029,592	3,463,335	n.a.	1,371,061	r 3,565.5	708.9
1982-83	4,096,347	5,886,578	3,567,328	4,136,077	n.a.	1,443,162	3,689.2	764.1

(a) Average weekly balances in month of June (June quarter before 1945-46).

(b) From 1946-47 average weekly debits to customers' accounts; earlier figures, average weekly clearings (calendar years before 1928-29).

(c) Calendar year ended six months later than the financial year shown.

(d) At 30 June.

GROSS VALUE OF PRODUCTION STATISTICS (\$'000)

Year	Crops	Livestock disposals	Livestock products	Total agriculture	Forestry, fishing, and hunting	Mining (a)	Manufacturing (net value) (b)
1911 ..	6,372		24,912	31,284	2,904	7,430	11,094
1915 ..	10,046		41,104	51,150	3,352	6,794	15,510
1920 ..	20,772		48,284	69,056	5,724	7,042	23,378
1925-26 ..	25,106		52,204	77,310	5,778	3,906	33,762
1930-31 ..	25,642		43,092	68,734	3,260	2,658	27,057
1935-36 ..	24,760		42,144	66,904	5,470	4,860	31,366
1940-41 ..	36,776		62,476	99,252	6,882	8,516	43,289
1941-42 ..	35,548		61,678	97,226	6,160	8,656	49,661
1942-43 ..	41,264		78,986	120,250	6,162	8,564	58,089
1943-44 ..	45,012		82,350	127,362	7,386	7,168	60,421
1944-45 ..	49,268		77,442	126,710	6,742	7,080	61,804
1945-46 ..	51,626		78,638	130,264	7,118	7,242	60,539
1946-47 ..	41,052		88,058	129,110	9,620	7,808	70,673
1947-48 ..	64,264		128,782	193,046	9,822	11,258	85,773
1948-49 ..	76,614		145,444	222,058	11,242	10,666	107,079
1949-50 ..	81,826		192,982	274,808	11,624	14,436	122,708
1950-51 ..	84,842		286,378	371,220	14,100	22,038	150,919
1951-52 ..	94,424		214,048	308,472	19,440	22,224	182,659
1952-53 ..	142,248		275,322	417,570	19,100	36,974	196,419
1953-54 ..	146,982		271,904	418,886	21,358	36,802	220,509
1954-55 ..	155,862		265,164	421,026	20,626	45,032	240,121
1955-56 ..	152,496		274,096	426,592	22,618	55,872	256,160
1956-57 ..	162,028		324,066	486,094	24,804	61,860	276,799
1957-58 ..	171,530		258,618	430,148	24,660	52,976	287,916
1958-59 ..	191,310		287,252	478,562	22,006	56,706	310,931
1959-60 ..	183,354		315,350	498,704	22,900	80,376	324,783
1960-61 ..	203,442		300,770	504,212	23,190	89,120	341,255
1961-62 ..	210,550		287,880	498,430	20,054	83,100	350,595
1962-63 ..	252,478		322,802	575,281	21,094	93,482	380,966
1963-64 ..	294,434		365,214	659,648	23,500	100,970	441,873
1964-65 ..	270,639		357,066	627,706	25,022	103,783	478,423
1965-66 ..	274,221		343,904	618,125	25,689	106,901	542,996
1966-67 ..	318,954		370,430	689,383	25,806	146,080	592,607
1967-68 ..	308,922		370,298	679,221	26,123	148,876	657,853
1968-69 ..	356,912		428,110	785,022	28,041	155,788	659,897
1969-70 ..	305,602	264,613	132,853	703,067	27,930	229,970	712,857
1970-71 ..	349,323	218,709	108,203	676,236	32,303	245,746	..
1971-72 ..	421,889	244,034	129,539	795,462	33,819	239,208	870,782
1972-73 ..	434,603	310,989	195,603	941,195	38,477	322,103	1,012,595
1973-74 ..	519,459	360,254	182,871	1,062,585	36,820	503,099	1,220,174
1974-75 ..	868,191	193,273	163,790	1,225,254	38,469	672,336	1,618,730
1975-76 ..	851,854	243,151	180,968	1,275,972	46,594	773,764	(c) 1,800,088
1976-77 ..	890,677	319,607	207,789	1,418,072	66,595	896,106	1,991,434
1977-78 ..	824,619	372,210	210,589	1,407,418	75,217	985,872	2,090,444
1978-79 ..	1,097,281	868,396	241,704	2,207,381	100,030	1,137,231	2,322,426
1979-80 ..	1,129,259	965,088	258,270	2,352,617	109,994	1,510,779	2,692,294
1980-81 ..	1,452,137	711,720	247,578	2,411,436	n.a.	1,445,863	3,074,868
1981-82 ..	r 1,472,311	r 832,322	r 308,096	r 2,612,728	n.a.	1,546,135	3,448,170
1982-83 ..	p 1,278,961	p 788,000	p 314,341	p 2,381,301	n.a.	n.y.a.	n.a.

(a) From 1968-69 'value added'.

(b) Net value, including heat, light, and power until 1967-68. From 1968-69 'value added'.

(c) From 1975-76, excluding single-establishment enterprises with fewer than four persons employed.

APPENDIX B

Principal Events

The following is a chronological list of important events in the history of Queensland since first discovery:

- 1606 William Jansz, visited Cape York Peninsula.
- 1623 Jan Carstens explored Gulf of Carpentaria and Staaten River.
- 1644 Abel Tasman explored Cape York Peninsula, naming it Carpentaria Land.
- 1770 Captain Cook sailed up Queensland Coast. 16 May, Cook off Point Danger. Moreton (Morton) Bay named. 17 May, Cook named Cape Moreton (Morton). 22 August, Cook landed on Possession Island and took possession of the whole eastern coast, naming it New South Wales.
- 1799 Captain Matthew Flinders explored Moreton and Hervey Bays.
- 1819 Lieutenant Philip King began three years of sea-orientated exploration in the *Mermaid* and *Bathurst*.
- 1823 The Governor of New South Wales, Sir Thomas Brisbane, sent John Oxley to find a site for a penal settlement. Recommended Redcliffe Point in Moreton Bay as site.
- 1824 Following exploration of the area by Lieutenant Miller and Allan Cunningham (botanist), the Moreton Bay penal settlement was established at Redcliffe Point on 14 September.
- 1825 Moreton Bay penal settlement moved to a new site on the Brisbane River between Queen and William Streets.
- 1826 First school opened in Brisbane.
- 1827 Cunningham named Darling Downs. Coal used in limestone kilns at Ipswich.
- 1828 Queensland's first industry established—a tread-mill to grind maize, Wickham Terrace, Brisbane.
- 1837 Arrival of first steamer *James Watt* in Moreton Bay.
- 1838 German missionaries settled at Nundah, a future suburb of Brisbane.
- 1839 Brisbane penal settlement was officially closed.
- 1840 The Leslie brothers settled on the Darling Downs.
- 1841 First sale of Moreton Bay land held in Sydney.
- 1842 Free settlement began in Moreton Bay. First land sale held in Colony.
- 1843 Moreton Bay settlement became an electoral division of New South Wales.
- 1844 Ludwig Leichhardt and Sir Thomas Mitchell began their exploration of vast areas of Queensland.
- 1845 First population count, Moreton Bay and Darling Downs districts—1,599 persons.
- 1846 First newspaper *Moreton Bay Courier* published. Port Curtis founded as a penal settlement.
First commercial production of coal, Redbank.
- 1848 Native Mounted Police Force established.

- 1850 First bank opened.
- 1856 Augustus Gregory's expedition from Northern Territory reached Brisbane.
- 1858 First discovery of payable gold at Canoona.
- 1859 6 June, Letters Patent agreed to for separation of Queensland from New South Wales.
6 September, Brisbane, with a population of 5,000, was proclaimed a municipality.
10 December, separation of Queensland from New South Wales was proclaimed by the first Governor, Sir George Ferguson Bowen.
- 1860 On 22 May, Parliament of Queensland had its first sitting with R. G. W. Herbert as the first Premier.
Act regulating occupation of Crown lands.
- 1861 The Supreme Court of Queensland was established.
- 1862 Peak Downs copper discovery.
First telegraph link between Brisbane, Ipswich, Toowoomba, and Sydney.
- 1863 The Brisbane Council was authorised to erect a Town Hall in Queen Street.
Severe floods occurred in the Brisbane River.
Introduction of Kanaka labour.
Act authorising government construction of railways passed.
- 1864 On 1 January, the first Police Commissioner was appointed.
The first commercial production of sugar was obtained at Ormiston.
- 1865 The first bridge across the Brisbane River, a temporary wooden structure, was opened to traffic.
The first rail line, from Ipswich to Grandchester, was opened.
Cobb and Co. started operating coach services.
- 1867 Gold was discovered at Gympie, Cape River, and Cloncurry and copper at Einasleigh and Cloncurry.
Constitution Act passed.
Railway line from Ipswich to Toowoomba completed.
- 1868 Walkers Limited factory was established at Maryborough.
Ravenswood gold discovery.
Population exceeded 100,000.
- 1869 Gilberton gold and Mount Perry copper discoveries were made.
Free education introduced.
- 1870 Sheep numbers exceeded 8,000,000 and cattle numbers 1,000,000.
- 1872 Gold at Charters Towers and copper at Mount Flora were discovered. Tin was discovered in the Stanthorpe region, and opals in western Queensland.
- 1873 Gold discovered at the Palmer, attracting 15,000 Europeans and 20,000 Chinese over the next three years.
- 1874 The Victoria Bridge over the Brisbane River, with swing span for shipping, was opened.
- 1875 The railway from Roma Street, Brisbane, to Ipswich was opened.
Kangaroo Hills tin discovery. Hodgkinson gold discovery.
- 1876 Coen gold discovery.
- 1877 First woollen mill opened at Ipswich.

- 1879 Elections by secret ballot were adopted by all States.
- 1880 Tin discoveries were made in the Herberton region.
- 1882 Mount Morgan gold discovery was made.
9 December, first electric power display in Brisbane.
- 1884 Southern portion of New Guinea annexed by Great Britain and administered by Queensland.
- 1885 Croydon gold discovery was made.
Queensland had the largest number of cattle of any Australian colony.
Queensland became the third largest colony in population.
- 1888 Electricity supply to the G.P.O., Brisbane, commenced.
The first through trains from Brisbane to Sydney, transshipping at Wallangarra, commenced running.
- 1890 Country arbitrary meridian (C.A.M.) system of mapping was introduced.
Chillagoe-Mungana silver-lead discoveries were made.
- 1891 Railway from Brisbane to Gympie was opened.
Shearers' and maritime strikes.
- 1893 Electricity was connected to 91 consumers near the G.P.O., Brisbane. The first hydro-electricity station, Thargomindah, opened for rural supply.
Eight of the 11 banks of issue failed and were closed.
A major flood occurred in Brisbane and both the Victoria Bridge and the Indooroopilly railway bridge were destroyed. Considerable damage was done to parts of South Brisbane, heavy shipping was stranded in the Botanical Gardens, and river channel silting interfered with shipping for a year.
- 1895 Native Mounted Police Force disbanded.
- 1897 Countess Street, Brisbane, power station opened by Brisbane Tramways, and electric trams commenced running.
- 1899 'Bathurst Bay Cyclone'—pearling fleet destroyed—over 300 lives lost.
Formation of first Labour Government.
- 1900 Roma (Hospital Hill) gas discovery was made.
A period of copper discovery and smelting began at Kuridala, Selwyn, and Mount Cuthbert. Copper smelting commenced at Mount Garnet and Mount Molloy.
- 1901 The Commonwealth of Australia was established.
The former Colony of Queensland became a State of the Commonwealth of Australia.
First Parliament of the Commonwealth of Australia opened in Melbourne.
Chillagoe-Mungana and Etheridge copper discoveries were made and smelting commenced.
- 1902 Brisbane was proclaimed a city.
Mount Morgan copper production commenced.
- 1904 The City Electric Company was established as successor to the Brisbane Electric Supply Company.
- 1905 Suffrage for males and females was introduced.
- 1908 First National Park, Witches Falls on Tamborine Mountain, proclaimed.
- 1910 Water control by State Act was introduced.
The Workers' Dwelling Board was established.

- 1911 Queensland University opened in George Street, Brisbane.
- 1912 The supply of electricity to local consumers in provincial towns commenced.
- 1915 Compulsory voting was introduced in Queensland.
- 1916 Workers' Compensation Act passed.
- 1920 The Main Roads Board was instituted.
Queensland and Northern Territory Aerial Services Ltd (Qantas) was formed with headquarters at Longreach.
- 1921 District Courts were abolished.
First Basic Wage declaration by State Industrial Court.
- 1922 State Legislative Council (Upper House) was abolished.
First airmail service—Charleville to Cloncurry.
- 1923 Mount Isa silver-lead-zinc discovery was made.
A system of unemployment insurance commenced.
- 1924 Brisbane to Cairns rail line was completed.
- 1925 On 1 October, the Greater Brisbane Council was constituted.
The Main Roads Commission was established.
- 1927 Mount Morgan mine was closed.
The first motor vehicle assembly took place in Brisbane.
Parliament of the Commonwealth of Australia moved to Canberra.
Roma Oil Corporation gas discovery was made.
- 1928 Flying Doctor Service was commenced by the Australian Inland Missions.
Charles Kingsford-Smith arrived in Brisbane after Pacific Ocean crossing.
- 1929 Mount Morgan mine re-opened.
- 1930 The present Brisbane City Hall was officially opened.
Brisbane to Sydney air service was inaugurated by Australian National Airways.
- 1931 Cracow gold discovery.
- 1932 The Grey Street Bridge in Brisbane opened to traffic.
- 1937 Cement was produced from Moreton Bay coral.
- 1938 The State Electricity Commission was established.
State population exceeded 1,000,000.
- 1939 Queensland State Council for Physical Fitness first meeting.
- 1940 Story Bridge, Brisbane, was opened to traffic.
Local consumers in 64 provincial towns were being supplied with electricity.
- 1941 Burleigh Heads mineral sand production commenced.
- 1942 Uniform federal income taxation commenced.
- 1944 Pay-as-you-earn (PAYE) income taxation introduced from 1 July.
- 1945 The Queensland Housing Commission established.
Queensland Institute of Medical Research established.
By the end of World War II, 750,000 United States servicemen had passed through Brisbane.
Free government hospital service introduced.
- 1947 'Displaced Persons' commenced arriving from Europe.

- 1948 Introduction of the 40 hour week.
- 1951 Main Roads Department established.
- 1954 Mary Kathleen uranium mine was opened.
- 1955 Bauxite was discovered at Weipa, Cape York Peninsula.
- 1957 Labor Government failed to legislate for three weeks' annual leave for all workers.
Premier expelled from Labor Party.
- 1959 The District Courts were re-established.
Flying Surgeon Service introduced, Longreach.
Television transmission commenced in Brisbane.
The Townsville Copper Refinery was established.
Brisbane City and State Centenaries were celebrated.
Coking coal mined at Kianga for the first time.
- 1960 Radio School of the Air opened.
- 1961 The first commercial oil discovery was made at Moonie.
Open-cut coal mining at Moura commenced.
Natural gas piped from nearby wells to Roma power-house.
University College, later to become James Cook University of North Queensland,
opened at Townsville.
Gladstone-Moura rail link opened.
- 1963 Mary Kathleen uranium mine was closed.
- 1964 Alton oil discovery.
School leaving age raised to 15 years.
- 1966 Decimal currency introduced 14 February.
- 1967 Gladstone alumina plant was opened.
High-grade nickel laterite discovered at Greenvale.
- 1969 New Victoria Bridge, Brisbane, was opened to traffic.
- 1971 Cyclone 'Althea' extensively damaged Townsville.
Hay Point coal bulk-handling port opened.
- 1972 Commencement of the use of the 'metric system of measurement' as the sole
system of measurement of physical quantities.
- 1973 Captain Cook Bridge and first stage of South Eastern Freeway in Brisbane was
opened.
State population exceeded 2,000,000.
- 1974 Australia Day weekend floods caused 14,000 homes in Brisbane to be under
water, following cyclone 'Wanda'.
Office of Parliamentary Commissioner for Administrative Investigations, 'Om-
budsman', created.
Age of majority reduced from 21 to 18 years.
- 1975 Rock phosphate production commenced at Duchess and Lady Annie.
Griffith University opened, Brisbane.
Colour service commenced on Brisbane's four television stations.
- 1976 Succession and Gift Duties, Abolition Act.
Mary Kathleen uranium mine recommenced production.
First woman Rhodes Scholar.
Cyclone 'Ted' devastated Mornington Island.

- 1977 H. R. H. Queen Elizabeth II visit on the occasion of the Silver Jubilee of Her reign. Severe flooding North Queensland and Gulf Country.
New Coat of Arms adopted for State.
- 1978 The planetarium, located in Brisbane's new Botanic Gardens at Mount Coot-tha, opened.
Opening of the cross-river rail link, the Merivale Bridge, between South Brisbane and Roma Street Stations.
Aurukun and Mornington Island, previously Church Aboriginal Communities, established as Local Authorities under the *Local Government (Aboriginal Lands) Act 1978*, on 22 May.
- 1979 Queensland's Parliamentary Annexe opened by the Duke of Gloucester.
Great Barrier Reef Marine Park agreement signed with Commonwealth Government.
Electric trains commenced to run in Brisbane.
Houghton Bridge, the longest road bridge in Australia, replacing the Hornibrook Highway Bridge between Brighton and the Redcliffe Peninsula, opened by the Premier.
- 1980 Huge stock losses in drought. Much of Queensland had one of the hottest, driest summers on record.
Major construction work commenced on the \$212m Brisbane International Airport re-development project.
- 1981 World Heritage Committee accepted the Great Barrier Reef for World Heritage listing.
Agreement between Mount Isa Mines Ltd and Queensland Government to proceed with \$550m Newlands Coal Project.
- 1982 The Brisbane City Mall, in Queen Street, was opened by the Lord Mayor.
Brisbane was the host city to the XII Commonwealth Games. The Games were opened on 30 September by H. R. H. Prince Philip and closed by H. R. H. Queen Elizabeth II on 9 October.
Mary Kathleen uranium mine, which re-opened in 1975, was closed again.
Production commenced at Queensland's first aluminium smelter at Boyne Island near Gladstone.
Stage 3 of the electrification of the Brisbane rail services became operational.
- 1983 Cyclone 'Elinor' crossed the coast near Carmila on 4 March.
H.R.H. Prince Charles and Lady Diana made a visit in April.
The Chairman of the Commonwealth Games Foundation, Sir Edward Williams, was named Queenslander of the Year.
The Lord Mayor of Brisbane, Alderman Harvey, unveiled the Courier-Mail Clock in the Queen Street Mall to mark the newspaper's 50th anniversary.
Caboolture marathon runner, Ron Grant, completed an around Australia run.
Widespread rainfall in April and May ended the drought which in many areas was the worst on record for the past 100 years.

APPENDIX C

Recent Information

Some recent information which has come to hand since the various chapters were sent to press is given in summarised form below. For later statistics on the subjects dealt with in chapters, reference should, in general, be made to other ABS publications.

Chapter 4 GOVERNMENT

1 SYSTEM OF GOVERNMENT

The Premier of Queensland was appointed as a Knight Commander of the Order of Saint Michael and Saint George on 16 June 1984 to become Sir Johannes Bjelke-Petersen.

2 THE QUEENSLAND PARLIAMENT

Dr D. J. Murphy (*A.L.P.*) who held the seat of Stafford in the Queensland Parliament died on 21 June 1984.

3 STATE GOVERNMENTS

The Hon. N. K. Wran (*A.L.P.*) was returned as Premier of New South Wales at the election of 24 March 1984.

7 LOCAL GOVERNMENT

In a proclamation of 18 February 1984 the Town of Hervey Bay was constituted to be a City, under the *Local Government Act* 1936–1984.

APPENDIX D

Special Articles in Previous Issues

The following is a list of special articles which have appeared in previous issues of the *Year Book* showing the title of the article, the year of issue, and the pages on which they appear.

- Artesian Water: 1945, 108–111
- Family Expenditure Enquiry: 1945, 176–190
- Computer Service Centre: 1967, 482
- Co-ordinator-General's Department: 1973, 60–64
- Discovery, Settlement, and Development to 1859: 1974, 1–21
- Department of Justice: 1974, 88–92
- Tornado, November 1973: 1974, 578
- Floods, January 1974: 1974, 578–582
- Discovery, Settlement, and Development, 1859 to 1901: 1975, 6–21
- Basic Economy: 1975, 71–72
- Department of Education: 1975, 89–95
- Discovery, Settlement, and Development, 1902 to 1975: 1976, 13–32
- Reclamation of Prickly-pear Lands: 1976, 19–21
- Metric Conversion: 1976, 570–575
- Department of Primary Industries: 1976, 99–104
- Tropical Cyclones: 1977, 57–65
- Department of Mines: 1977, 87–89
- Department of Labour Relations: 1978, 71–78
- Department of Harbours and Marine: 1979, 72–76
- Department of Transport: 1980, 72–76
- Department of Health: 1981, 72–81
- Department of Forestry: 1982, 74–78
- Department of Lands: 1983, 74–78

INDEX

NOTE. Numbers in *italics* refer to Appendix A (Summary of Statistics).

	Page		Page
A		Area	
Abattoirs	367	Brisbane Statistical Division	124
Aboriginal		Brisbane Urban	94
Constitution alteration	210	Local Authorities	116
Development Commission	212	Metropolitan	94
Health	171	Queensland	1, 97
Ranger service	212	States and Territories	1
Students	212	Within tropics, all States	1
Aboriginals		Art Gallery	153
Communities	211	Artesian basin	5, 107
Culture	212	Artificial fertilisers used	297
Education	212	Assistance to families	209
Effect of white settlement	64	Assistance to industry	324
History	56	Assistance to trade and industry	350
Kindergartens	212	Australian Banks' Export Re-Finance Corporation Limited	422
Population	210	Australian Industry Development Corporation	423
Schools	212	Australian Meat and Livestock Corporation	366
Welfare	212	Awards, industrial	230
Accidents		Award rates of pay indexes	236, 473
Electrical	335		
Industrial	242	B	
Mining	308	Baby clinics	171
Road traffic	258	Bacon and ham production	332
Activity therapy centres	208	Bananas	289, 463
Administrative arrangements	83	Banking	420
Adoption of children	204	Bankruptcy	424
Adult education	144	Banks	
Advanced education	146	Commonwealth	420
Age distribution of population	114	Debits to customers' accounts	421, 476
Age pensions	200, 456	Development	422
Aged, homes for	202	Primary Industry	423
Agent-General for Queensland	352	Savings	422, 476
Ages		Trading	421, 476
At death	192	Barley	
At divorce	135	Marketing	358
At marriage	134	Production	289
Of hospital patients	180	Basic Wage	
Of mothers	128	Commonwealth	234
Of students	140	State	234
Agricultural Bank	416	Bauxite production	311, 465
Agricultural College	146	Beekeeping	305
Agricultural industries		Beef cattle (see meat cattle)	
Establishments	284	Benefits schemes: medical, hospital	206
Holdings, size	286	Betting tax	409
Value of operations	285	Biomass	450
Agriculture		Birds	11
Climate	49	Births	
History	69	Ages of mothers	128
Production	287, 462	Ex-nuptial	129
Production, value	434, 477	Masculinity	126
Sugar cane and the Kanakas	65	Multiple	129
Times of planting and harvesting of crops	55	Queensland	126, 455
Air		Rates	127, 455
Pollution control	172	Reproduction rates	127
Transport	262	Statistical Divisions	126
Airports, passengers and freight	263	Still-births	130
Alienated land	97, 460	Blood transfusion service	197
Allowances, family	209	Boards, marketing	354
Alternative working arrangements	222	Boat facilities	247
Aluminium	309	Bores, artesian	106
Ambulance services	195	Botanical Gardens	153
Animals, terrestrial	11	Bradfield Scheme	108
Annexation of New Guinea	66	Brigalow lands development	98
Ante-natal clinics	171	Brisbane	
Apiaries	305	Metropolitan Area	94
Apprenticeship	223	Statistical Areas	94
Arbitration, industrial	230		
Architects	272		

	Page		Page
Cremations	197	E	
Crime	159	Earnings	
Criminal		Average weekly	237
Courts	160	Survey of	240
Jurisdiction	156	Education	
Crops		Aboriginals	212
Area	287, 463	Adult	144
Fertilised	297	Advanced	146
Growers	286	Government expenditure	137
Irrigated	107	History	71
Planting and harvesting times	55	Migrant	143
Principal	289	Post-secondary	144
Value of production	290, 477	Pre-school	138
Cultural activities	152	Primary	140, 457
Cultural facilities, public	149	Secondary	140, 457
Customs duty	410	Special	142
Cyclones	41	Sub-tertiary	144
		Technical and further	144
		Tertiary	144
		University	147
		Egg marketing	362
D		Elections	
Dairy		Commonwealth	82
Production	303	Local Authority Councils	92
Products, marketing	360	Method of voting	75
Dairy breeds	300	State	76
Death duties	409	Electoral districts, general	93
Deaths		Electrical accidents	335
Ages	192	Electrical materials, price index	379
Causes	190	Electricity	
Crude death rate	130, 455	Commission, State	333
Fetal	130	Generation	332
Infant mortality	131, 455	Emergency Service, State	168
Maternal mortality	132	Employers' associations	231
Perinatal	131	Employment	
Queensland	130, 455	Apprentices	223
Rates, selected causes	190	Average earnings and hours worked	240
Road traffic	258	Equal pay for male and female workers	234
Debits (bank) to customers' accounts	421, 476	Facilities	226
Debt		Factory	325, 466
Government, Commonwealth	403	Hours and working conditions	238
Government, Queensland	404, 475	Labour force status	215
Defence Service Homes	282	Local trades committees	225
Department of Commercial and Industrial		Manpower planning	225
Development	324	Mining	313
Departure tax	411	Occupation	217
Disability pensions	201	Training and assistance schemes	226
Discovery and exploration	57	Workers under awards	230
Diseases		Energy and resources	442
Causing death	192	Environment	1
Communicable	170	Environmental Control Council	172
Notifiable	170	Estate duty	409
Treated in hospital	181	Excise duty	410
Disputes, industrial	233	Ex-nuptial births	129
District Courts	155	Expectation of life	132
Divisions of Queensland	92	Expenditure	
Divorce	134, 457	Consolidated Revenue,	
Domiciliary nursing care benefits	207	Queensland	397, 474
Domiciliary nursing services	194	Education	137
Double orphan's pension	209	Loan, Queensland	397, 475
Drought relief	416	Exploration and discovery	57
Droughts	36	Export	
Drunkness	161	Market Development Grants	352
Durations of marriages, births	128	Finance and Insurance Corporation	352
Dwellings		Exports	
At Censuses	268	Destinations	341
Class	269	Interstate	338, 468
Constructed	274	Overseas	
Nature of occupancy	271	Quantities, main items	342
Number of motor vehicles parked	272	Value	338, 468
Number of rooms	271	Ports of shipment	347
Occupied	269		
Unoccupied	270		

	Page		Page
Exports—continued		G	
Price index	349, 471	Gas	
Quantities, certain commodities	347	Industry	336
Value	339, 468	Natural	311
Value, six years	338	Resources	447
External trade, Queensland	338, 468	Gateway Bridge	255
		Geography	1
		Gemstones	310
		Geographical distribution of population	114
		Geology	3
F		Ginger	
Factories		Marketing	365
Manufacturing Industry Census		Production	296
Electricity and gas	332, 467	Gold Coast Waterways Authority	247
Employment	325, 466	Gold discoveries	63
Establishments	325, 466	Gold production	310, 464
Size of establishment	330	Golden Casket	417
Value added	325, 467	Government	
Wages and salaries	325, 466	Assistance to students	137
Manufacturing industry prior to 1968-69		Commonwealth	80
Capital equipment	466	History	68
Electricity and gas	467	Local	91
Employment	466	Queensland	75
Output and production	467	States	80
Salaries and wages	466	Governor-General	81
Principal commodities	331	Governors	73
Family		Grain sorghum	
Allowances	209	Marketing	359
Court of Australia	156	Production	294
Income supplement	209	Grammar schools	142
Fauna	11	Grants, general revenue	386
Federation	67	Grazing selections	97
Fertilisers used	297	Great Barrier Reef	24
Fertility rates	127	Great Barrier Reef Marine Park	18
Fetal deaths	130	Green forage	289, 463
Film Corporation	153	Gross reproduction rates	127
Finance		Growers of crops	286
Companies	428, 476		
Housing	279	H	
Local government	412, 475	Ham and bacon production	332
Private	420, 476	Handicapped	
Public	386, 474	Children's allowances	207
Roads	253	Children's benefits	207
Semi-government bodies	415	Intellectually	189
State	397, 474	Harbours	245
State financial institutions	416	Harvesting times, crops	55
Financial crisis, 1866	63	Hay	289, 463
Financial relations	386	Health benefits	206
Fire brigades	166	Health facilities	
Fire insurance	425	Residential	174
First home owners scheme	282	Non-residential	192
Fish	15	Health, history	71
Fish Board	368	Health Insurance Program (Medibank)	206
Fisheries production	321, 465	Health services, public	
Flooding	47	Commonwealth Government	169
Flora	8	Local Authority	172
Flying doctor service	173	State	169
Flying surgeon service	171	Heart diseases	
Food prices, Queensland Towns Indexes	375	Death rate	190
Forestry		Deaths	192
Department	316	Patients in hospitals	181
Management	317	Heat, light, and power	332, 467
Production	319	Higher Courts	160
Fowls	304	Hire purchase	427
Freehold land	97	History	56
Fruit		Home deposit assistance scheme	282
Crops	294	Home nursing services	204
Marketing	364	Honey production	305
Planting and harvesting times	55	Horses	299, 461
Wholesale prices	378		
Funeral benefits	210		
Further education	144		

	Page		Page
Hospitals		In-patient health facilities	174
Benefits schemes	206	Instalment credit for retail sales	427, 476
Expenditure	176, 456	Institute of Technology	146
Mental	189, 456	Insurance	
Patients treated	179	Corporation, Export Finance	352
Private	180	General	425
Public	180, 456	Health (Medibank)	206
Recognised	174	Life	424, 476
Hours worked		Workers' Compensation	243
Average	240	Interest on public debt	
Survey of	240	Australia	404
Under awards	238	Queensland	404
Household		Internal trade	430
Census	268	Interstate trade	
Surveys	440	Exports	339, 468
Housing		Imports	343, 468
Census	268	Invalid pensions	200, 456
Commonwealth-State agreements	281	Irrigation	
Construction	272	Areas and projects	104
Co-operative societies	280	On agricultural establishments	107
Costs	283	Water storages	104
Finance			
Government	281	J	
Private	279	Judicial separations	134
Loans Insurance Scheme	282	Jurisdiction	
Queensland Commission	281	Civil	155
		Criminal	156
I		Jury service	158
Immunisation	172		
Imports		K	
Countries of origin	346	Kanakas	65
Interstate	343, 468	Kindergarten Teachers' College	146
Overseas	342, 468	Kindergartens	138
Ports of discharge	347		
Price index	350	L	
Quantities, certain commodities	347	Labour force	
Total		Characteristics	216
Value	343	Distribution	218
Value, six years	338	Industry groups	216
Income		Status	215
Tax rates	406	Surveys	
Tax assessments	408	Alternative working arrangements	222
Index numbers		Educational attainment	221
Export prices	349, 471	Employment status	220
Import prices	350	Labour force experience	222
Retail prices		Labour mobility	222
'C' series	472	Persons looking for work	222
Consumer index	371, 472	Persons not in the labour force	222
Wholesale prices	379, 472	Transition from education to work	222
Indexation, wage	234	Weekly earnings of employees	223
Industrial		Lambs marked	300
Accidents	242	Land	
Authorities		Administration Commission	96
Federal	230	Agents' districts	93
State	230	Alienated	97, 460
Disputes	233	History of settlement	96
Safety	242	Leasehold	97, 460
Workers under awards	230	Legislation	64
Industries		Reserved	101
Assistance to	350	Tax rates	408
Assistance Commission	351	Tenures	96
Census 1981	216	Law, order, and public safety	155
Government assistance	417	Lead production	310, 464
Value added	325	Leave, annual, long service, sick	239
Industry and commerce training	223	Legal	
Industry Development Corporation	423	Assistance	158
Infant mortality		Profession	158
Australia, rates	132	System	155
Queensland	131, 455		

	Page		Page
Legitimation	129	Manufacturing	
Libraries	151	Capital expenditure	329
Licences		Commodities, principal	331
Air transport	263	Foreign ownership and control	329
Liquor	166, 457	Geographical distribution	328
Motor drivers'	257	History	71
Radio	459	Industry (see also factories)	324, 466
Road transport	258	Materials wholesale price index	382
Sawmill	317	Size of establishment	330
Licensing		Marine insurance	425
Commission	157	Marketing control	354
Court	157	Marriages	
Life insurance	424, 476	Ages of parties	134
Life saving	167	Category of celebrant	134
Limestone	310	Marital status of parties	134
Linseed	295	Queensland	133, 455
Liquor		Rates	133, 455
Licences	166, 457	Religious denominations	134
Taxation	410	Masculinity, births	126
Livestock		Maternal	
Distribution in divisions	300	Health service	171
History	70	Mortality	132
Losses	300	Meals on wheels	204
Numbers	298, 460	Meat	
Owners	287	Abattoirs	367
Prices	378	Cattle	
Sizes of flocks and herds	287	Breeds	300
Slaughtering	300, 471	Number	298, 460
States	299	Sizes of herds	287
Value of production	434, 477	Exports	341, 469
Livestock and Meat Authority	367	History	70
Living conditions	30	Marketing	366
Loan		Medibank	206
Council	388	Medical benefits schemes	206
Expenditure		Medical practitioners registered	173
Local Government	414	Members of Parliament	76
Queensland	397, 475	Mental sickness	189
Fund, Queensland	397	Meteorology	30
Loans, Australian	388	Metropolitan	
Local Authorities		Area	94
Areas	116	Transit Authority	253
Business undertakings	412	Migrant education	143
Finance	412, 475	Migration	113
Functions	411	Milk	
Health services	172	Cattle	
Loans	414	Breeds	300
Personal income tax sharing	413	Number	298, 460
Populations	116	Sizes of herds	287
Properties rated	412	Production	303
Local Government	91	Supply in urban areas	361
Local Government finance		Mineral exploration	314
Loan liability	414	Mineral production	309, 464
Receipts and expenditure, all funds	412	Mineral sands concentrates	464
Receipts and outlay	414	Miners engaged	313
Local trades committees	225	Mines	312, 464
Lottery		Mines Rescue Brigades	309
Gold Lotto	417	Minimum wage rates	236
Golden Casket	417	Mining	
Tax	410	Accidents	308
Lower Courts	161	Assistance to	308
		Census	312
		History	70
		Industry	307
		Leases	100
		Operations	313
		Royalties	307
		Tenements	307
		Ministry	
		Commonwealth	81
		Queensland	74

M

Magistrates Courts	156
Main roads	255
Maize	
Marketing	360
Production	289, 462
Mammals	11
Manpower planning	225

	Page		Page
Seasonal		Sugar	
Activities in agricultural industries	54	Assignments	355
Conditions	54	Board accounts	357
Secondary education	140	Export quotas	356
Semi-government bodies	415	Exports	
Semi-government finance		Australia	356
Outlay	415	Queensland	341, 469
Receipts and financing items	416	History	65
Senior citizens' centres	213	Marketing	354
Separate colony	62	Pools	356
Separation from New South Wales	61	Prices	357, 470
Service pensions	201	Production	293, 462
Settlement, early	56	Sunflower seed	295
Sharks, protection from	167	Sunshine, hours of	49
Shearers' strike, 1891	65	Superannuation	
Sheep		Parliamentary	75, 418
Breeds	300	Police	418
Number	298, 460	Public service	418
Owners	287	Supporting Parents' Benefits	200
Prices, wholesale	378	Supreme Courts	155, 457
Shorn	302	Surf life saving	167
Sizes of flocks	287	Surveys of weekly earnings and hours	240
Slaughtered	300, 471		
Sheltered employment allowances	208	Taxation	
Sheltered workshops	208	Collections in Queensland	
Shipping at Queensland ports	248, 458	Income tax	405
Short-term money market	423	Land tax	405
Sickness		Other taxes	405
Benefit, Commonwealth	201	State and Australian	405
Mental	189	Total	448
Patients treated in hospitals	179	Rates	
Silver production	311, 464	Income	406
Sinking fund, public debt	475	Land	408
Slaughterings	300, 471	Other	409
Small Claims Tribunal	156	Teachers' colleges	146
Small Debts Courts	156	Technical and further education	144
Soccer football pools tax	410	Technology, Institute of	146
Social services		Telecommunications and posts	263
Commonwealth Government		Telegrams	264
Expenditure	199	Telephones	264
Pensions and allowances	200	Television stations	266
State	199	Temperatures	32
Social welfare	199	Temporary Assistance Authority	351
Soil conservation	101	Tenures, land	96
Soils	6	Terrestrial animals	11
Solar energy	450	Timber	
Sorghum, grain		Logs processed	320
Marketing	359	Plywood mills	320, 465
Production	294	Sawmills	320, 465
Sound and television broadcasting	265	Tin production	311, 464
Soybeans	296	Tobacco	
Special articles, previous issues	487	Charge	409
Special benefits	201	Marketing	365
Sport	213	Production	295
Stamp duty	410	Torres Strait Islanders	211
State Electricity Commission	333	Totalisators	409
State Emergency Service	168	Tourism	435
State Government finance		Tourist accommodation census and surveys ..	437
Expenditure on new fixed assets	401	Trade	
Final consumption expenditure	399	Agreements	352
Government securities on issue	404	Assistance to	350
Outlay	397	Commissioner Service	351
Receipts and financing items	402	Exports	338, 468
State Government Insurance Office	417	External	338
State housing	281	Imports	342, 468
Statistical Districts	93	Retail	430
Statistical Divisions	93	Wholesale	433
Still-births	130	Trade practices, Federal	385
Stock Exchange	429	Trade unions	231
Students, government assistance	137	Trading banks	421, 476
Succession duty paid	406		

	Page		Page
Traffic		W	
Accidents	258	Wage	
Offences	161	Award rate of pay index	473
Trainee technicians	225	Basic	234, 473
Trainees, adult	225	Districts	93
Training		Indexation	234
Employment	226	Minimum	
Industry and commerce	223	Federal	236
Pre-apprenticeship and pre-vocational	225	State	236
Transport		Total	234
Air	262	War pensions	201
Local Authority services	252	Water conservation	102
Rail	248	Water Quality Control Council	172
Road	256	Water storages	104
Sea	245	Weather	30
Tropical cyclones	41	Welfare establishments, residential	202
Trust funds	397, 474	Welfare services, non-residential	204
Tuberculosis allowances	208	Wheat	
		Australian Wheat Board	358
U		Marketing	358
Underground water supplies	106	Production	294, 462
Unemployment benefits	201	State Wheat Board	358
Unions		Wholesale price indexes	
Credit	426	Articles produced by manufacturing	
Employees'	232	industry	383
Employers'	231	Building materials	379, 472
Universities		Manufacturing industry materials	382
Courses completed	149	Metallic materials	381
Establishment	147	Wholesale prices of farm products and meat	378
Faculties	147	Wholesale trade survey	433
Griffith	148	Widows' pensions	200
James Cook, North Queensland	148	Wildlife	19
Queensland	147	Wind energy	451
Staff	148	Wireless licences	459
Students	148, 457	Witches Falls National Park	20
Uranium	311	Wool	
Urban centres	123	Districts	303
Urban passenger services	252	Exported overseas	341, 468
		Fleece weight	302
V		Marketing	363, 471
Value added	325, 467	Production	302, 461
Value of production	434, 477	Sales	
Vegetables		Average price	363, 471
Marketing	364	Quantity	363
Prices, wholesale	378	Tax	409
Production	292	Workers'	
Vegetation	8	Compensation	243
Veneer production	320, 465	Compensation Board of Queensland	417
Voting at elections		Working conditions	238
State	76		
Commonwealth	82	Z	
		Zinc production	311, 464
		Zoogeography	11